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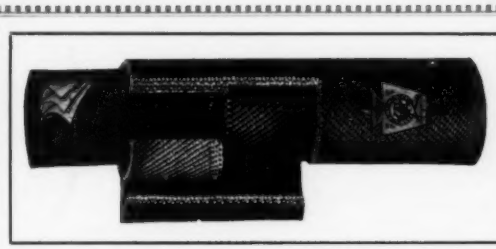
The Journal of the Fire Protection Profession

MAY 14, 1930



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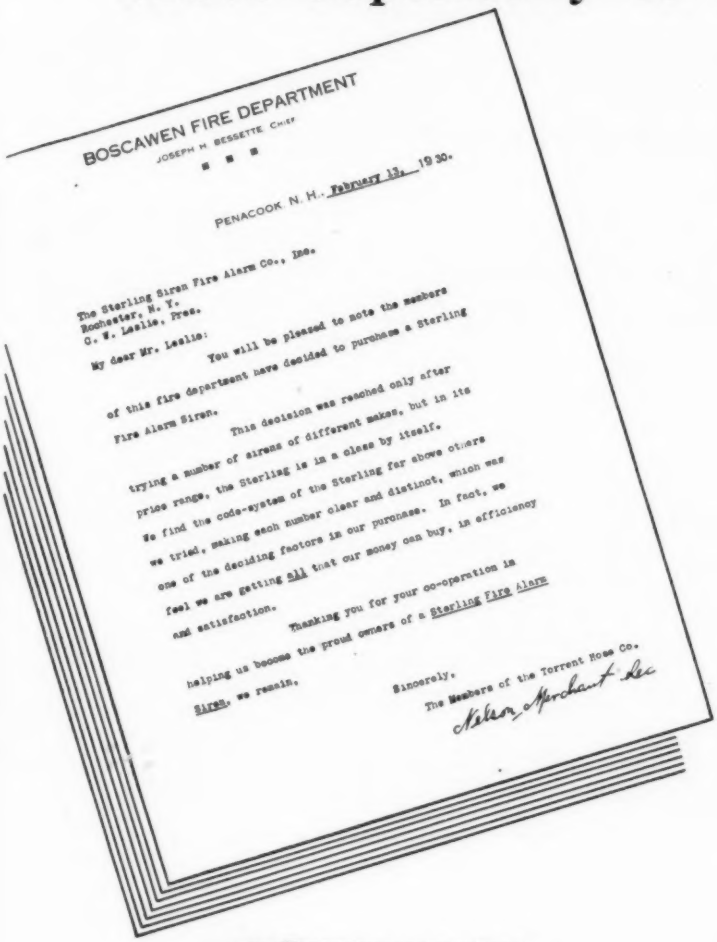

BOSCAWEN FIRE DEPARTMENT
JOSEPH H. BESSETTE Chief

PENACOOK, N. H., February 13, 1930.

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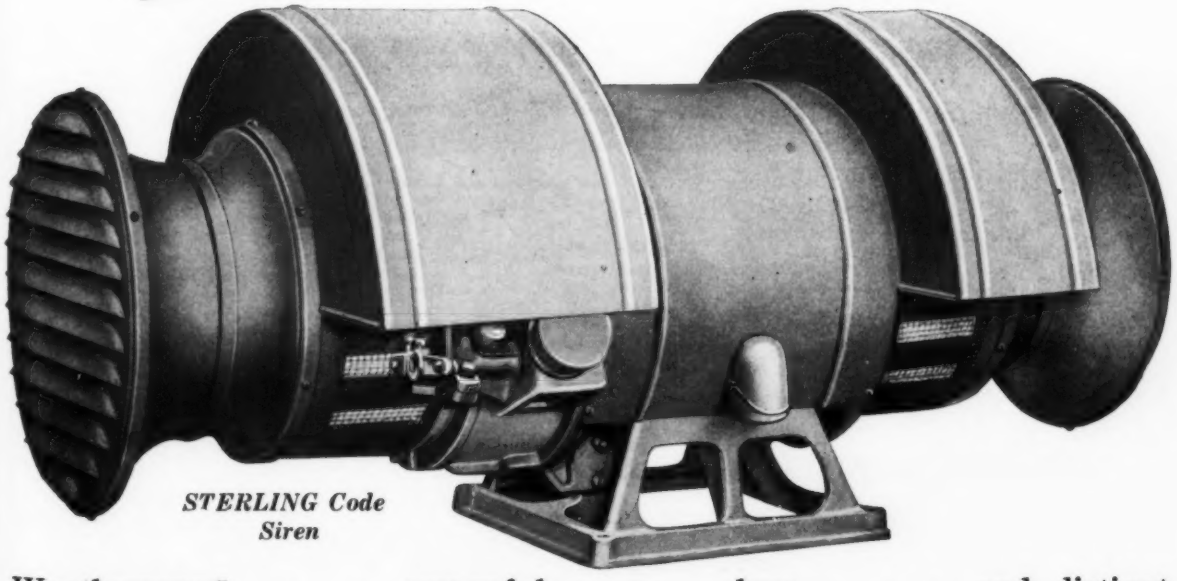

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FIRE ENGINEERING

A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER

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It is with the deepest regret and sorrow that we record the death of

Harold T. Murray

Vice President and Western Manager of Case-Shepperd-Mann Publishing Corporation and for many years the closest of associates and most loyal of friends.

The Publishers

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FIRE ENGINEERING

(A Consolidation of Fire and Water Engineering and The Fire Engineer)

The Journal of the Fire Protection Profession

VOLUME LXXXIII MAY 14, 1930 NUMBER 10

Fighting New York City's Fires Before They Occur

Work of the New York Bureau of Fire Prevention — Supervision of the Transportation of Gasoline, Oils and Explosives — Other Supervisory Work

By PETER C. SPENCE, Chief, Bureau of Fire Prevention, New York Fire Department

THE protection of New York City from the fires and explosions that would naturally occur through carelessness and ignorance, is a man-sized job. How it is taken care of is told in the following article by the man who is responsible for this work:

Peter C. Spence

To the ordinary citizen, mention of the Fire Department recalls a burning building, the sound of a fire alarm, the screech of sirens, the rushing apparatus through the streets in mad haste to the scene of the fire, the heroic efforts of firemen scaling ladders to save lives and the mastery of the demon fire. But quicker and much less theatrical work is done by the Bureau of Fire Prevention in its efforts to prevent fire and protect from fire the lives of the people by enforcing all laws and regulations which have this for its object.

In Colonial days efforts were made to regulate by law the storage of turpentine, pitch, tar, shavings and gunpowder. But it was not until after the Civil War that there was any organized effort to safeguard life and property from the storage of hazardous materials.

The development and growth of the industries directed attention to the manufacture, storage and use of explosives, and in 1873 the Bureau of Combustibles was established.

Personnel of the Bureau of Fire Prevention

After the Ash building fire in 1911 when 147 lives were lost the Bureau of Fire Prevention was created by an act of the state legislature. This clothed the Fire Commissioner with the duty of safeguarding life and property, ordered the formation of bureaus to extinguish fires, to prevent fires, to investigate the causes of fires and such other bureaus as he saw fit to carry out this work assigned to him.

Inspectors must qualify by passing a civil service examination and have the necessary experience. Many have technical knowledge and training, some are college graduates with degrees in chemistry, in engineering, others are skilled in building construction, others have been plumbers and studied sprinkler and standpipe requirements. There are electrical engineers who layout interior fire alarm systems, inspect the electrical installations on standpipe and sprinkler work and pass on all devices of this character for the Board of Standards and Appeals. Others have acquired a knowledge of fuel oil, refrigeration, the requirements of the labor law concerning exits and other protection. The Code of Ordinances and rules and regulations of the Board of Standards and Appeals must also be applied where conditions are affected. All of these laws and ordinances have been interpreted by justices in the courts by decisions on specific cases and opinions of the Corporation Counsel have been requested from time to time to elucidate various statutes or clarify their meaning.

"Inspectors must qualify by passing a civil service examination and have the necessary experience. Many have technical knowledge, some are college graduates, with degrees in chemistry, in engineering; others are skilled in building construction; others have been plumbers and studied sprinkler and standpipe requirements."

The city of New York covers 315 square miles and has a population of 6.6 millions, and there are 602,620 buildings.

For the work assigned to the Bureau of Fire Prevention, it has 246 employees, expends in salaries $558,020, issues 112,275 permits and collects in license fees $976,-021 or $418,000 over and above the cost of its personnel.

The labor law contains mandatory requirements for the construction of factories. The code of Ordinances has provisions for business buildings, storage and non-storage garages, technical establishments, gas manufacturing and oil storage plants.

Supervision of Gasoline and Inflammable Oils

From the number of automobiles registered in the city of New York—there are over 500,000—one can readily estimate the aggregate gallonage of volatile inflammable oil in the fuel tanks of the cars, the supply in the storage garages and oil selling stations, in the oil storage plants, and in transit in tank trucks, and the supervision of this commodity alone is a considerable task. It is estimated that in this city, 400 million gallons of gasoline, 10 million gallons of varnoline and 4 million gallons of fuel oil are used in a year.

Other Multifarious Duties of Inspectors

Supervising the transportation and use of explosives, chemicals, inflammable and combustible material, the disposition of bombs and suspicious packages and fireworks are the duties of Inspectors. They inspect oil refineries; oil storage plants, technical establishments; varnish, paint and lacquer factories; wholesale drug and chemical supply houses; inflammable and combustible mixtures; match factories; cleaning and dyeing establishments; inflammable motion picture films; ammunition; gases under pressure; combustible fibres; gasoline selling stations; storage and non-storage garages; motor vehicle repair shops; fuel oil; refrigeration; chlorine and acetylene gases and blasting operations.

Inspectors are on call at night, Sundays and holidays in addition to their daily service.

Transportation of Dynamite

The construction of subways and the extension of the water supply for Brooklyn and Queens has caused a considerable increase in the supply of dynamite for blasting. The magazines in which dynamite are stored are carefully constructed and located with a minimum of hazard to surrounding properties. The route of travel of the vehicle transporting this explosive is restricted as much as feasible so as to avoid travel on crowded thoroughfares, over bridges, subways and railroad tracks. It is estimated that during the peak of the construction work now under way five tons of dynamite will be detonated daily. Shipments of explosives are also made on steamships leaving this port to South America and other parts.

Tank Truck Used to Fight Forest Fires

A tank car has been designed for use in fighting forest fires in Los Angeles County, Cal. The pump installed can deliver 150 gallons of water a minute. The equipment of the Los Angeles County Forestry Department has been completely overhauled in preparation for the brush-burning season.

Regulation of Fuel Oil for Heating Purposes

Consumption of fuel oil has largely increased supplanting coal as a fuel. To store this commodity safely it should be in buried tanks, piping and pumps installed according to rules and in a workmanlike manner with an adequate exhaust flue, ventilation and necessary fire protection. So extensively has the use of fuel oil increased that an application is on file with the Board of Estimate and Apportionment for consent to construct and maintain a pipe line to convey fuel oil from a barge to a main storage tank to supply 2,500 houses in Queens. Should this operation be consummated over 550,000 gallons of oil would be used during the year.

Storage of Hospital Films

In May, 1929, there was a fire in the Cleveland Clinic, where 125 lives were lost from burning nitro cellulose film in a vault in the basement or cellar. Hospitals and clinics in this city have been before and immediately after this occurrence under rigid and periodic supervision to maintain safe conditions in connection with this storage. Fireproof vaults, approved cabinets, properly vented and sprinkler protected are required for films. To further safeguard patients and inmates in these institutions the Board of Aldermen by ordinance prohibits the use of nitro cellulose film and all records on nitro cellulose film must be removed by 1932.

Regulating Celluloid Products

Rigid amended regulations in the Code of Ordinances for the storage and use of celluloid products such as pyralin, fiberoid, viscoloid, have resulted in a total reduction of the loss of life from fires in this industry. In the vaults of the various exchanges dealing in moving pictures there are stored over 500 tons of film in addition to that kept in various theatres and motion picture houses.

Non-Inflammable Motion Picture Film

In April, 1922, the City of Paris, France, enacted an ordinance that motion picture film presents a serious danger of fire and that it is possible to substitute non-inflammable film it was ordered that the use of picture films of celluloid or other readily inflammable material be forbidden in establishments open to the public after January 1, 1925. Following this action the International Association of Fire Engineers, the organization of Fire Chiefs of America agreed that nitrocellulose film is a menace to life and property and inasmuch as slow burning film is available and non-hazardous, the expensive burden of inspection, regulation and surveillance of motion picture displays is unwarranted and the Federal, State and Municipal Governments were called upon to prohibit by law the use of nitro cellulose film

(*Continued on page* 422)

Fighting Fires in Buildings of Uncertain Construction

Converted Office Buildings of Early Vintage, and Old Type Manufacturing Buildings Uncertain in Their Action Under Fire—Life Hazard to Operating Force Severe

IN every large city, due either to the migration of various lines of business to newer sections or to gradual deterioration of particular sections, there are to be found a large number of buildings of very uncertain construction. Some of the buildings were built originally for manufacturing purposes while others were built for office occupancy but were afterwards converted to factory use upon the industrialization of particular sections in which they are located. In either case, the fire department is likely to encounter an occupancy not in line with what the building was originally designed for, as an example of this may be cited in a large eastern city where an old type commercial building, designed for offices and showrooms, is now used as a warehouse for printing paper. The tremendous overloading of the floors can be appreciated, and the hazard incidental to a fire is readily understood.

Due to the wide variation in the type of occupancy as well as the construction of old buildings, fire department officers have to be ever on the alert to anticipate the inevitable. At a fire in a building in New York several years ago the officer in command checked up on the type of building, and upon its occupancy (paper storage), and after the fire had been burning for a while he ordered all men off the various floors and to operate from window sills or ladders only. Five minutes after this order was carried out, one of the floors fell through carrying the others below with it. This is a typical example of what the present day fire officer in the large city must be prepared to cope with in his line of work.

In this article of the series on fire fighting one particular type of building only will be considered. It is the building originally built for office occupancy and subsequently converted to industrial purposes, such as manufacturing, storage, etc. Such buildings usually have hoistways or shaftways running from the ground floor to the top floor just inside the front wall and usually in line with a row of windows. In addition, there is also likely to be found one or two stairways—near the front and rear of buildings if there are two, and near the front if there is but a single one.

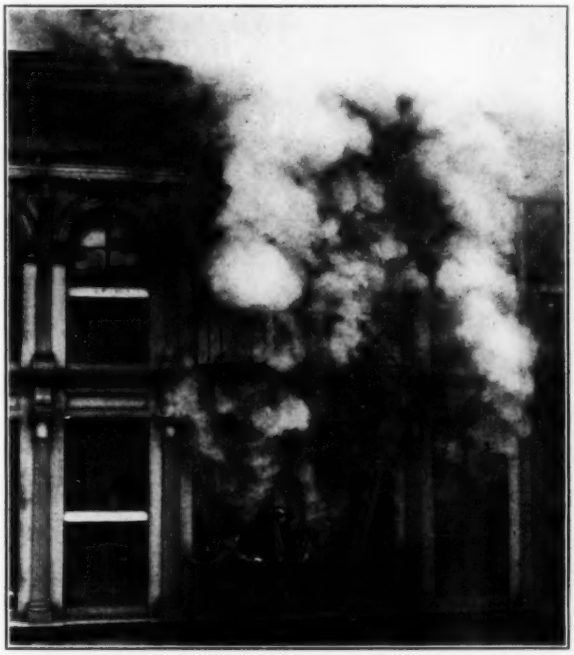
Building is usually of brick construction faced with stone, and sometimes cast iron, although this latter type is vanishing rapidly.

Floor beams are of wood flooring, of plank, and ceiling either of matched lumber, lath and plaster, or sheet iron.

Frequently beams from several buildings in a row adjoin each other in the common walls, providing a passageway for fire from one building to the other in the event that one of the buildings becomes fully involved. These buildings are usually provided with fire escapes front, or front and rear, simplifying the operations in the event of a fire.

The nature of occupancy has a great deal to do with the methods to be employed in fighting the fire occurring therein. For example, if the building is occupied in the manufacture of artificial flowers a flash fire may be expected, while if it is employed in the manufacture of light metal articles, heavy loading may be looked for on the various floors; but not much in the way of combustible materials.

A number of the buildings may be found with sprinkler systems, while others have but perforated pipes in the basement, fed by the fire department through a siamese connection located at the street level. Basement conditions are usually bad due to the presence of wood construction and accumulations of unused materials and rubbish.



Dense Smoke Is Frequently Encountered at the Old Commercial Building Fire

Even oil soaked floors, commonly found in this type of building which has been converted to light manufacture, will create dense smoke. But the articles manufactured and stored in such buildings embrace such a wide variety that dense fumes and smoke may be expected at almost any fire in this type of structure.

Fire originating in the basement will quickly find its way to the upper floors and, due to the wooden floors and other combustible features, will quickly spread throughout the building.

After the fire has burned for some time on any of the floors the floor beams will be weakened and unless the loads on the floors are very light, there is a possibility of floors falling through. As noted previously, floors are sometimes stocked with materials of far greater weight than what the floors were originally designed for with the result that early collapse, even due to accumulations of water on a floor, may result.

Assume a building of typical design, stocked with heavy materials, and equipped with neither standpipe system or sprinkler system, the method of operation would be as follows:

When fire starts in basement and upon the arrival of the department is traveling up shaftways or stairways to upper floor, first company in immediately places deck guns in front of building and connects to engine or high pressure hydrant if such is available. Get line in operation to cover external exposures, and also to cover the shaftway which can be reached on the various floors with a deck gun stream. This method of procedure will check the fire in its spread upward, and may result in holding the fire to one floor.

Immediately after deck gun is in operation have members of this first company stretch in line on ground

Operations Are Not So Easy Where Fire Escapes Are Missing

Insecure stairways within building, and combustible construction in connection therewith, frequently make this means of reaching upper floors impossible. In this case ladders and fire escapes are the only means of operating on upper floors, slowing down the work of the department immensely. In view of the combustible nature of the building, and contents, the fire is apt to gain considerable headway unless deck guns or water towers are on hand early to wet down while ladders are being put in position.

floor from front of building to cover stairway and kill fire on ground floor.

Second due engine company stretch to the rear and get line in operation on the ground floor, and cover any vertical shafts at rear of building.

These operations are based on the assumption that the fire started in the basement and that efforts are being directed to holding it to that point.

If fire has spread upward and is burning at points above the ground floor, the second engine company should stretch a second line at once by way of rear fire escape or by ladders to the top floor.

Members of first due truck company open up for engine companies and get ladders into position where necessary.

Third engine company use front fire escape and get lines in operation at floors below the top floor, assuming that the line from the second due engine company is alone able to handle the top floor.

Members of second due truck company go to the roof at once to open up for ventilation so that inside work can be done effectively and without men taking unnecessary punishment.

After these points have been covered, members of truck company should be ordered to survey buildings on both sides to make sure that fire has not entered from basement of fire building through spaces between adjoining beams to basements on either side.

Where Building Is Fully Involved

In the event that the building is fully involved upon the arrival of the department, the first action will be to transmit immediately a second alarm; if the occupancy of the building and the surrounding exposures warrant it, a third alarm may be justified in an average building of the type described above.

Where upper floors are involved, and where the loadings on the floors are heavy, precautions must be taken to guard the men. In the event that there is evident weakening of floor beams or floor supports due to fire, and if floors are heavily laden, then men should only operate from window sills or from ladders placed at windows, or from fire escapes. Then in the event that a floor gives way, there will not be as much chance of injury. Likewise, men operating on ground floor beneath floors above which are burning should be kept well in hand and ordered out of the building the moment conditions seem to justify this action.

Occasionally in one of the earlier types of business buildings, having cast iron fronts, intense heat within the building will cause the plates to break away from the building and fall to the street. Officer in charge must be on the alert to protect his men in the event that there is a possibility of this happening.

In protecting adjoining buildings, do not overlook the cornice, for frequently fire gets into the cornice and travels concealed from the fire building to buildings on either side. Unless cornice is opened up and inspected properly, the department may have a much bigger job on its hands than it originally figured.

Where the buildings have inclined roofs, there is a likelihood of there being open cock lofts. In this case, the roof should be opened up early in the operations to make sure that fire is not extending laterally.

Walden Heads Worcester Patrol

Lieutenant Lorton C. Walden has been appointed superintendent of the Insurance Fire Patrol by the Board of Directors of the Worcester, Mass., Protective Department, as successor to the late Supt. William H. Buertin.

The new superintendent joined the patrol in 1920 and is a son of the late Jesse Walden who was a member of Ladder Company No. 3, of the Worcester Fire Department.

He was made a lieutenant a year ago when the two-platoon system was established. He served with the 74th Infantry of the 12th division at Camp Devens which outfit was preparing to sail for France when the armistice ended the World War.

Supt. Walden is 35 years old and lives at 10 Gardner Street. He is married and has two small daughters, one seven years old and the other a year old. He is familiar with the fire loss record system installed by the late Supt. Guertin as he was in charge of the clerical work in connection with the tabulations.

He is 35 years of age and has two brothers in the Worcester Fire Department where his father served for 33 years.

Patrolman Arthur C. Stevens has been promoted to lieutenant to take the place of Walden. HARRY BELKNAP.

THE ROUND TABLE

For Practical Discussion of Current Fire Department and Fire Management Problems

WHETHER you need a new ladder truck, a new fire station, better working conditions, an increase in wages, a larger pension fund, better cooperation on the part of the public, or many other things, the measure can invariably be won if the local newspapers are in back of the change. The printed word has a power that one scarcely dares to estimate.

Fire department matters make good news items. Every man has a keen interest in the firemen. When a boy, he set up the fireman as his hero, and even though later years may have added a few more to his list, the fireman is still a person to be worshipped because of his thrilling occupation.

Fires, in addition, mean loss of life, property damage, and personal injury—all the elements for a good news story. That is why most newspapers assign a reporter to call at fire headquarters each day to get facts for any possible story. From close association with the department, the editorial staff of a newspaper has a keener appreciation than any one else of the firmanic problems. The editor, therefore, is anxious to work with the fire chief for some needed department improvement or better working conditions for the men.

In the box on this page is the problem that is treated in this issue. In the box on the following page is the question that will be discussed in the next issue. Should you have some comment that you would like to make on the next problem, or if you have a question that you would like to see treated in this department, write to the "Round Table Editor," FIRE ENGINEERING, 24 W. 40th St., New York, N. Y.

HERE IS THE PROBLEM

Do you attempt to get publicity for the department?

Do you believe that frequent writeups in the local newspaper tend to create a better understanding of fire department matters?

What has been your experience with newspapers?

The Question

Many chiefs realize the importance of proper publicity,and they supply any information required by the newspapers. The letters received follow:

H. E. Nissen, Chief, Winston-Salem, N. Car.: We attempt and do get desirable publicity for the fire department through the newspapers, which in many ways proves to be beneficial, and insist that all articles be confined strictly to department matters. No officer, individual, or group is allowed to exploit themselves through this medium.

We do not believe that frequent write-ups in local newspapers tend to create a better understanding of fire department matters, but do believe that if there is anything pertaining to the fire department which the public is entitled to, especially if it be of interest to them, let them have it promptly and unreservedly.

Our experience with newspapers, broadly speaking, has been all that could be desired. Of course, at fires, we sometimes have our little troubles with the inexperienced and over zealous reporter, but, as in all lines of work he soon learns his business. If not, he soon loses his job and our petty annoyance so far as that individual is concerned, is at an end. In general, they are not troublesome.

Charles L. McCarthy, Chief, Worcester, Mass.: I do attempt to get publicity for the Worcester Fire Department, and never refuse to speak before a civic, fraternal or social organization. At the meetings of such organizations questions are asked and answered and thus much information of the proper sort is divulged.

I certainly do believe that frequent writeups, of the proper type of course, tend to create a better understanding of fire department matters.

The Worcester newspapers have always been ready and willing to aid me in any matter on which I have approached them. They have always been very fair and just.

Hugh F. Morris, Chief, San Mateo, Cal.: I do attempt to get publicity for the fire department, and believe that frequent writeups in local newspapers tend to create a better understanding of fire department matters.

In the past as well as at the present time, my experience with the newspapers have been of great value to the fire department and its work. It not only informs the public of the work and progress of the department, but also instructs them in the great importance of fire prevention.

Ed J. Hunsinger, Chief, Massilon, Ohio: Yes, I believe it is quite proper to get a certain amount of publicity for the fire department by the medium of newspapers, as this gives a chief the opportunity of presenting to the people of the city his views and recommendations along fire prevention lines. At the same time the people receive the necessary data to help themselves in emergencies.

I give a thorough writeup through the newspapers four times a year to the people of our city, such as warning the people to clean up any collection of rubbish and ashes which may exist; removal and clearing away of grass and weeds from buildings; the installation and maintenance of the Christmas tree and its electrical equipment, etc. I believe such writeups to be the proper way to educate most people along fire prevention lines.

My experience with newspapers in the way of publicity for educational purposes and fire prevention, has been most satisfactory and I surely appreciate their cooperation for public improvement and betterment that publicity affords. It is not good practice to present such material at too frequent intervals, as the people may ignore them if such were the practice.

Harry A. Whiteside, Chief, Beatrice, Nebr.: When I assumed command of the fire department ten years ago we did not have a friendly newspaper in the city. I immediately called on the various papers and explained that we needed their support, and they ours. Now, anything we have in the way of news, they are willing to use, as they have a reporter who calls every day at headquarters. If we want to put over some new ordinance, the papers are of great assistance in getting it over, for they feel the pulse of the public, and whether the public be for or against the problem presented, a little publicity generally brings the desired results.

James H. Swager, Chief, Niles, Ohio: We have the heartiest cooperation from our local paper the *Niles Times*, and

have found that such publicity has aided us materially in creating a better understanding between the fire department and the general public.

Much of the credit for a raise in wages received some time ago by members of this department is due the newspaper for its help. The publicity received also aided us in getting an additional ladder truck early this year. At the present time the paper is cooperating with us in a campaign for an additional fire station which is badly needed in Niles.

From personal experience we believe that it is good policy to secure the cooperation of the press in any movement likely to be of public interest.

Geo. W. Hedden, Commissioner of Fire, Buffalo, N. Y.: We get many letters commending the department for its work, and occasionally I take one of these letters, especially when a check accompanies it, and have the newspapers publish it.

Yes, I believe that an occasional write up in the newspapers helps to create a feeling of friendship among the public for the fire department. We are very fortunate in Buffalo; our department is continually being praised.

The newspapers in Buffalo have generally been very friendly, and the department is well thought of by both the press and the public. I do not believe that continual publicity is good for any department. Just an occasional writeup.

Talmer Wise, Chief Circleville, Ohio: We do endeavor to secure publicity for our department. Frequent writeups should be of considerable value to the fire department, if harmony exists between the department and the local papers.

My experience with the newspapers has been good, but I find that whenever facts concerning our operations is secured from outside sources, an error in reporting same very often occurs. The newspaper can be of considerable assistance in securing new equipment, in building up the personnel of the department, or in campaigns such as clean-up and Fire Prevention Week.

Chas. E. Fortin, Chief, Lewiston, Me.: We do attempt and get all the publicity we want through our local press.

I believe the writeups in the local papers not only tend to create a better understanding of the doings of the fire department, but also brings to the attention of the general public information that is useful. I do not believe in too frequent writeups, as it would be detrimental to the department and the people would soon tire of them.

My experience with the local newspapers, two American, and one French, has been of the best. They have never failed to cooperate with us and are especially helpful before and during Fire Prevention Week.

Wm. S. McLoughlin, Chief, Bayonne, N. J.: Reporters attached to the several newspapers of this city visit fire headquarters daily, and notes taken from desk record are as a rule published. This method gives the department considerable publicity.

I believe that frequent writeups tend to create a better understanding among the general public of fire department matters.

I find that editors are anxious to cooperate with us, and allot valuable front page and editorial space to us in order that we may place before the public our fire prevention methods and firemanic problems.

Geo. S. Watson, Chief, Washington, D. C.: The Washington Fire Department does not make any effort to obtain publicity in the press. Usually any particularly good piece of work is commented upon by reporters at the time it occurs, and in this way considerable publicity is achieved.

I believe that local press articles of the proper type are helpful to the department, and have in mind particularly our experience when we first organized our rescue squads. Publicity given to the varied work which these units were called upon to perform and the diverse nature of the emergencies which they handled successfully, was of great assistance in bringing to the attention of the public the potentialities of this branch of the department, and resulted in general knowledge on the part of the public relative to the service which we were prepared to render.

Our experience here with the five local newspapers has been most pleasant, and all of them have cooperated in every possible way with us in any effort we have made to better working conditions, etc. In return we have always tried to furnish their representatives with any desired facts or data, frankly and freely.

A. S. Kingman, First Asst. Chief, Cedar Falls, Iowa: Inasmuch as there is almost no greater known indoor sport than panning a public official or a department serving the public, it is purely a matter of ethics in self defense that a fire department should at all times endeavor to sell itself to the community which it serves, and the logical channel is through the press.

We never miss an opportunity to tell of our work and improvements. This has helped us in a great many ways. The city council is more willing to listen to our requests and the public has a better understanding and appreciation of our work, and hence, are more sympathetic toward us.

We receive good cooperation from the reports and city editor. They are glad to print items regarding things of interest in the fire department. They are always generous with the amount of space they assign to our items.

W. Coulter, Chief Framingham, Mass.: We do not attempt to get publicity for the fire department here. People have a peculiar idea about the department and actually consider it a necessary evil. You no doubt have often read the following lines:

When the Devil was sick the Devil a Monk would be;
But when the Devil was well, the Devil a Monk was he.

That condition is exactly what we are up against in this city.

I have never found the newspapers to be of any help in building up a department. For instance, in Framingham we have one paper and we are not sure whether they are for or against us.

F. M. Russell, Chief Albuquerque, N. Mex.: The only time we attempt to get publicity for the fire department is during Fire Prevention Week or for yearly reports.

While I do believe that a certain amount of educational write-ups are beneficial to the department. I would much rather have direct contact with the public.

We have always received excellent cooperation from the newspapers in matters pertaining to the fire department.

Carroll Nash, Chief, Dover, N. H.: We do not bother trying to secure much publicity. Of course, we run benefits now and then, but these are more to raise money than to gain publicity.

To a certain extent I believe writeups tend to help people understand fire department matters more fully, but we like to have the public come in the stations and ask questions. They are the taxpayers and are entitled to know something about their fire department.

In my experience I have found that the newspapers do not always print the items as they are given to them, thereby misleading the public.

Ed. R. Millspaugh, Chief, Wyandotte, Mich.: We try to secure publicity for the department in order to keep the public informed regarding fire department matters.

We have been very fortunate here in receiving excellent cooperation from the newspapers. I personally believe that articles in the newspaper aid in removing existing fire hazards.

(*Continued on page* 414)

HERE IS THE PROBLEM FOR THE NEXT ISSUE

What department in your city handles inhalator cases?

In case of accident, is the fire department or the hospital called?

Do you have a regularly trained first aid crew to handle city cases?

With the Editor

The Chief's Annual Report

Old Dr. Dresser, an eccentric but popular physician of the last century, always attributed his success to the fact that he invariably—where it was possible to do so—caused his prescriptions to be put up in the most attractive and palatable form that the pharmacist could put together.

Many a fire chief could take a leaf from the genial doctor's book, in preparing his annual report. The public as a whole is too fond of light reading and is too busy to bother itself with statistics or dry reading of any sort. If the Chief will bear this in mind in whipping together his record of the year's performance of his department, he will insure himself a much larger audience in presenting the facts of what has been accomplished.

This may be a task that is difficult for a busy Chief to accomplish. It is easy enough to tabulate the number of fires, and their causes, false alarms, apparatus and equipment and all the mass of detail through which the reader of the average annual report must wade. But it is a gift to present such material in an attractive and readable manner.

However the chief can always call in the services of a newspaper reporter in his city or town, if he feels that he has neither the time, inclination or ability to do the work himself. Dressed up with a little light reading, a few pictures, and with even the statistics themselves presented in a readable and attractive manner, the document will take on a new significance to the average citizen and the Chief will find the miracle of an annual report which will be read by all who receive it. Try it and see!

The Forest Fire Menace

The widespread forest and brush fires that have visited the New York metropolitan area, as well as portions of New England and New Jersey, in the past two weeks, have sorely tried the amateur fire fighters who by the hundreds have been engaged in battling with the flames. In many instances, too, the professional firemen have been called upon to lend their aid in controlling the widespread damage caused by the blazing forests and underbrush. This loss in the East has been greatly accentuated by the great damage to private property and buildings which such fires have caused. While in comparative area the fires in New York, New England and New Jersey, have been small, yet the property losses have mounted high on account of the fact that the lands burned over have contained dwellings, barns and buildings instead of only brush and forests.

Hysteria arising from the excitement of fighting the fires has led to the charge that the forest blazes, which have resulted so disastrously to the dwellers in the sections involved, were of incendiary origin. No doubt, many of such fires did originate from acts of the careless smoker, or the camper who failed to properly extinguish his camp fire. Such inexcusable neglect should be adequately punished if the miscreants can be apprehended, which is no easy task. But to believe that even an incendiary would stoop so low as to deliberately touch off a forest fire for revenge or to "see it burn" with the potentially high hazard to human life involved seems almost incredible.

The conditions of the past few weeks in the Eastern and Middle States have been conducive to forest fires. The drought, coupled with a high wind, has caused an extreme dryness and inflammability that makes the touching off of the underbrush an easy and simple matter. When once underway, such a fire, under present conditions, will spread with great rapidity and burn with great intensity. Lack of water facilities also helps to make matters worse, and it is no picnic to fight such fires. That the majority of these conflagrations have been brought under control promptly, speaks well for the fire fighters—professional and amateur.

A silver lining to the dark cloud is the prompt and splendid efforts at relief to the hundreds of homeless and ruined sufferers from the fires by the state governments, the Red Cross and many private individuals. This has gone a long way to aleviate much of the misery occasioned by this unfortunate visitation of fire.

Panics and the Fire Drill

Occasionally the coolness and heroism of an individual stands out distinctly in events of stress and danger. This happened when a curtain in a moving picture shown in Woburn, Mass., caught fire recently. One of the ushers was a high school youth of seventeen, who had taken the position in his off hours. Five minutes before the show commenced, this boy noticed a tiny flame back of the screen. On investigation, he found a curtain ablaze. Returning calmly to the auditorium, he announced to the audience, mostly composed of children, that a small fire had been discovered back-stage and asked them to retire in an orderly fashion, as there was no danger.

Partly because of the coolness of the youth and, no doubt, largely because these children had been well instructed in the fire drill in their schools, the audience filed out, and while, when the flames appeared about to quickly involve the entire interior of the auditorium,

there was a little pushing and hurrying on the part of those in the rear, there was no semblance of mad panic that undoubtedly would have seized a gathering of individuals in whom the idea of coolness in such an emergency had not been thoroughly grounded.

This is only another instance of the great influence that the fire drill has on the students of our schools, when they are confronted by a real emergency containing the elements of danger and panic. Steadiness and coolness under such circumstances are so grounded in the character of these youngsters that they become a part of their nature and control their actions, thus being instrumental in saving not only their lives but also those of others who may be a part of the company present when such untoward events transpire. For, while panic and mob fear is contagious, the influence of a few who may retain their coolness will often restrain a crowd from becoming fear mad and save them from the perils of a stampede.

Harold T. Murray Passes Away

FIRE ENGINEERING has sustained an irreparable loss in the death of Harold Taggart Murray, Vice-President and Western Manager of the Case-Shepperd-Mann Publishing Corporation, who passed away at his home, in Chicago of pneumonia on Tuesday, April 29, after a brief illness.

The Late Harold T. Murray

Mr. Murray was born on October 1, 1894, in Bradford, Pa. He was graduated from the University of Pennsylvania, School of Finance and Commerce (Wharton) in June, 1915. He was a member of Kappa Sigma Fraternity. After his graduation, he returned to Wharton for post graduate work during which time he was also Private Secretary to President Godfrey, of Drexell Institute. While under Dr. Godfrey, Mr. Murray was in charge of the reorganization of the school system. He also conducted an educational survey, the results of which he reported in an address at the University of Iowa, where similar reports from various parts of the country were being presented.

About 1917 Mr. Murray became an advertising salesman in the New York office of the Osgood Company, of Chicago and New York, and in the fall of 1919 he became New York Advertising Manager of the Certainteed Products Corporation, New York.

Mr. Murray's next connection was with the Foamite-Childs Corporation, Utica, N. Y., with which he served as Advertising Manager, Sales Promotion Manager and Assistant General Sales Manager. He established the corporation's house organ, "Blazes," and was also Editor of the "Industrial Fire Chief," a trade magazine published by Foamite-Childs. He was a lover of fine typography, and his work on these periodicals won favorable comment from *Printer's Ink*, and similar magazines.

He has been Vice-President as well as Western Manager of the Case-Shepperd-Mann Publishing Corporation for the past two years, handling work on FIRE ENGINEERING, *Water Works Engineering*, *Municipal Sanitation* and *Electricity on the Farm*. The latter publication he was largely instrumental in establishing. He was regarded as a leading authority in the field of rural electrification.

Mr. Murray was married on June 25, 1919, in Springfield, Ill., to Margaret Georg. He is survived by his widow, and two children, Harold, seven years of age, and Barbara, five. He is mourned by an unusually large following of close friends, both among his social and business associates.

Funeral services were held at the Murray home, 1343 East 50th Street, and at St. Paul's Episcopal Church, Chicago, followed by interment in the cemetery in Springfield, Ill., one of the most beautiful in the United States, where Abraham Lincoln is buried.

CORRESPONDENCE

Credit for Lifeboat Idea

To the Editor:

In the April 16, 1930 issue of FIRE ENGINEERING we read an editorial that gives Salamanca, N. Y., credit for a brand new wrinkle in fire department practice.

You stand corrected, Mr. Editor, as the Fairmont Fire Department under the supervision of Chief Ralph F. Doolittle built a trailer, mounted an all steel lifeboat upon the trailer, and equipped the chief's car and two trucks with draw bars to pull the boat to the river whenever and wherever needed. This idea was put into practice here July 1927 and has been in use since that time. Equipment consists of a jointed pike pole, two sets of oars, grapple hooks, ropes with snaps and hooks on the ends, and an H-H inhalator.

All firemen and policemen have had training in the latest methods of life saving so that at all times there is a competent crew of live savers available.

This trailer was built light but strong with semi-elliptic springs and rubber tired wheels. A roller is mounted on the back end making it a simple task for man to launch the boat upon arrival at the river.

Another feature of the trailer is that it can be wheeled into the river, the straps holding the boat are unfastened, and the craft floats away at once. These features are time savers and as such are, of course, invaluable in an emergency.

Yours very sincerely,

RALPH F. DOOLITTLE,
Chief of Fire Department,
Fairmont, W. Va.

Wisconsin Firemen to Meet in Plymouth—The Eastern Wisconsin Firemen's Tournament will be held in Plymouth, June 11-14.

Lansing, Mich., to Erect Fire Station—Work will be started soon on a new fire station for the eighth ward of Lansing, Mich.

Apparatus Struck by Trolley—A fireman was seriously injured when a street car in Des Moines, Ia., crashed into fire apparatus that was returning from a fire. Witnesses said the street car was speeding.

Beloit, Wis., Chief Retires on Pension—Chief John Nygren of Beloit, Wis., has retired on a pension after serving as chief since May 1, 1908. Assistant Chief Paul Roth was made head of the department. He has been a member of the department for the past twenty-four years.

Questions and Answers

NOTE—Readers are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified

Chemical Stream vs. Water Stream

To the Editor:

We recently had quite a discussion here regarding the qualities of a forty gallon tank of chemical and a forty gallon tank of water.

If we had a fire in a room 9 by 12 feet, the fire enveloping the whole room, which would be the most effective, the chemical or the water, if they both discharge at 120 pounds pressure?

Do you recommend booster tanks or chemical tanks for use in the residential section? Also which is better, water or chemical?

Thanking you for your trouble, I am

J.W.W.

Answer. There is no appreciable difference between the extinguishing effect of a chemical stream and a water stream of the same size.

In the instance you cite, where fire is burning in a room 9 by 12 feet, the whole room being enveloped, if the room were tightly closed the fire would probably burn only a short time due to the lack of oxygen. Hence it is assumed that there are openings through which air is being fed to the fire. In this case, any small amount of carbon dioxide gas discharged with a chemical stream would have no appreciable effect on the blaze.

Booster tanks are being widely used for work in connection with residential fires, and are at present considered one of the standard pieces of equipment for operating at small blazes.

Salvage Work

To the Editor:

At a recent meeting of our fire board the question of organizing a salvage squad came up for discussion. While all agreed that a salvage squad could accomplish much good there was some question as to whether or not we should use for this purpose some of the firemen or whether it should be composed of an entirely different group.

We are a city of about 25,000 population and our fire department is composed of seventeen permanent men and one hundred and fifty call men.

Will you please advise what the general practice is in cities that have such squads. Are they composed of firemen or are they organized and maintained by the underwriters or some such body?—C.I.T.

Answer: Many fire departments in this country in cities the size of yours or smaller, are doing very fine work in salvage operations.

The usual plan is to use regular firemen for this work, and particularly truckmen. Each truck carries four or more salvage covers, and many of the engine companies or hose companies carry covers as well.

Just as soon as the more important operations at a fire, such as opening up, getting ladders into position, etc., have been accomplished, the truckmen then go to work spreading covers on the floors below the fire, or at such a point as covers may be required to protect property.

Some of the large departments have special salvage squads, but this is not common practice. Several of the large cities have salvage corps maintained by the insurance companies, but the insurance organizations do not plan forming any more companies in the future. You will appreciate that the fire insurance premiums in any particular city must be sufficient to carry the cost of the salvage corps in addition to covering other expenses incidental to insurance and paying the insurance companies a small margin of profit as well.

Fundamentally salvage work is a function of the fire department, for it is just as important for the fire department to save property by preventing water damage, as it is to save property by preventing its being involved by fire. This conclusion is now generally appreciated in fire circles with the result that salvage work is gaining in popularity in fire departments throughout the country.

Factor for Open Butt

To the Editor:

On page 237 of the March 19th issue in your answer to: discharge from open butt, you say "K" for 2½-inch open butt is 2.8. Is that correct? According to the formula used for finding "K", this 2.5 x 2.5 x 2.5 x 2.5 divided by 10 equals 3.90. I was wondering if you did not mean 3.9 in place of 2.8. Will you kindly inform me which is correct so that I can make a record of it in my book.—C.C.B.

Answer: The figure for "K", the factor for 2½-inch hose with open butt, is 2.8 as given. In solving for engine or nozzle pressure by use of the Underwriters' formula, a factor of prime importance is the rate of flow of water, which determines the friction loss. The discharge from an open butt is 20% less (on an average) than from a nozzle of the same diameter. For this reason the friction loss in the line supplying an open butt of 2½-inch diameter is less than that in a line supplying a nozzle of the same diameter.

You will appreciate this when you remember that the formula for determining the discharge from a nozzle is as follows:

Discharge equals 29.7 x D x D $\sqrt{}$ P.

The formula of finding the discharge from an open butt is as follows:

Discharge equals 29.7 x D x D $\sqrt{}$ P X .80, where this last figure is a coefficient, or factor, necessary to determine actual discharge from theoretical discharge. It is the partial restriction of flow caused by open butts that necessitate a different value of "K" than that found by the usual rule of multiplying the diameter of the nozzle by itself three times and dividing by 10.

Placing Ladders

To the Editor:

In your March 19 issue you state, in answering a question regarding placing ladders at a tenement house fire, that the first ladder company should place ladders front and rear to fire escapes or if no fire escapes are present, place the ladders front and rear of building.

Will you please advise me how a ladder can be placed at the rear of a tenement house? How can you get a 35 foot ladder to the rear, assuming the tenement is in a row and the yards are 10 feet or less in width?

S. A. J.

Answer: While it is not always possible to get ladders to the rear of apartment houses, for fast work where rescue operations are necessary, there are many cases where ladders can be so placed, by bringing them up between buildings at the end of a block. You will appreciate that in fire fighting operations conditions vary widely and we have to assume such conditions when answering questions. Of

course, if it is not possible to get ladders to the rear of apartment houses, then this operation cannot be performed.

Furthermore, a 35-foot ladder is not needed to reach the fire escape landing on the second floor, although such ladders would be required for higher points on the building.

Unless the conditions are explicitly given in the question as asked, and unless certain conditions are imposed, it is up to the candidate at an examination, in answering the questions, to assume conditions.

I. A. F. C. Exhibit Space Available

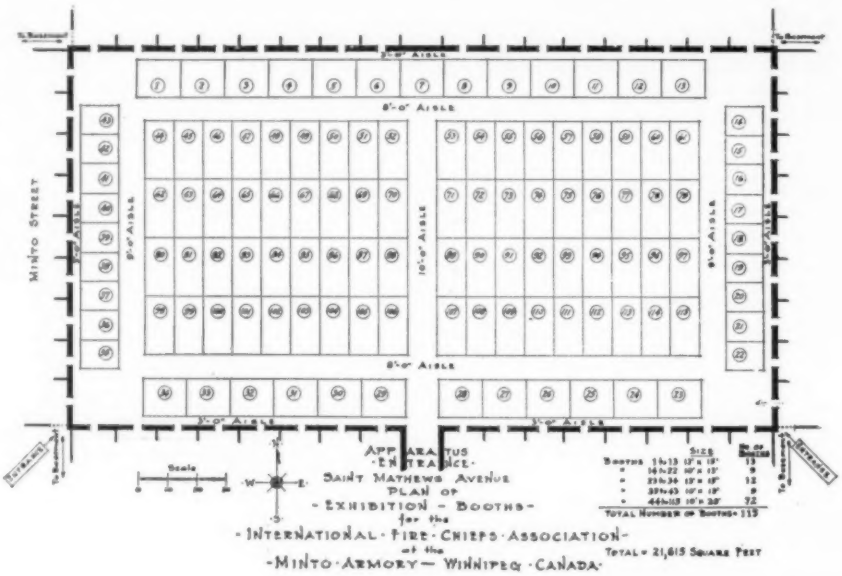
A total of 115 booths will be available in the Minto Armory for the display of exhibits at the annual convention of the International Association of Fire Chiefs to be held in Winnipeg, Canada, September 9-12.

Manufacturers who plan to exhibit at this gathering should communicate with Chief Charles Alt, St. Louis, Mo., Chairman of the Exhibit Committee.

All exhibits should be billed to James J. Mulcahey, Secretary, Winnipeg, Canada. Arrangements for free entry provide that they be billed as "Exhibitions" with the added understanding that if sold at point of exhibit, customs duty will be collected at the time of the sale; otherwise, the material will return duty free through the United States Customs after the convention.

To facilitate the entry of exhibits through the Canadian Customs, the Exhibit Committee has arranged for concentration of all exhibits at Chicago. All shipments should be billed via Chicago, c/o Burlington Route—Northern Pacific. From Chicago, after assembly into a special train, the merchandise will move direct via Burlington—Northern Pacific to Winnipeg. At the time of acceptance and execution of exhibit space contract, each party will be advised of the exact date of departure of the special train so that shipments may be billed into Chicago to meet the date set. By this method at least one full day will be saved. An official of the railroads will travel with the train to speed these shipments.

The illustration shows a diagrammatic arrangement of the booths. Two or three booth selections should be made when the contracts are forwarded to Chief Alt to be executed.


MINTO STREET
APPARATUS ENTRANCE
SAINT MATHEWS AVENUE
PLAN OF
- EXHIBITION - BOOTHS -
for the
- INTERNATIONAL · FIRE · CHIEFS · ASSOCIATION -
at the
- MINTO · ARMORY — WINNIPEG · CANADA -
TOTAL = 21,615 SQUARE FEET

Arrangement of Booths in the Minto Armory for the Coming I. A. F. C. Convention

Illinois to Hold Short Course

The Sixth Annual Fire College will be held at the University of Illinois, Champaign-Urbana on June 17-20. The following tentative program has been arranged and approved by C. E. Palmer, Director of the Fire College.

TUESDAY, JUNE 17. Morning—8:30 Registration, 221 Engineering Hall.

Purpose of School—C. E. Palmer, Director of the Fire College. Address of Welcome—Milo S. Ketchum, Dean, College of Engineering, University of Illinois. Address—Governor Emerson. Response—President Hasse of the Illinois Firemen's Association. Response—Clarence N. Goldsmith, Asst. Chief Engineer National Board of Fire Underwriters. Response—S. L. LeGreid for the Department of Trade and Commerce, State of Illinois.

Afternoon.

The Hazards of Dust Explosion—Bureau of Chemistry of Soils, United States Dept. of Agriculture. Handling and Storage of Gasoline—Representative of Shell Petroleum Corporation. Evolutions—Fire Chief Thos. D. Blake and squad of seven men, Rockford Fire Department. Inspection of University.

WEDNESDAY, June 18—Morning.

Progress in Fire Fighting Equipment and Hydraulics of Fire Streams. Incrustation of Fire Mains—Clarence N. Goldsmith, Asst. Chief Eng., National Board of Fire Underwriters. Common Fire Hazards—H. A. Reinebach, District Inspector, Illinois Inspection Bureau. Safe-guarding the Storage of Photographic, X-ray and Motion Picture Films—Harold H. Hunter, Engineer, Chicago Board of Underwriters.

Afternoon.

Demonstration, Hydraulics of Fire Streams—Clarence N. Goldsmith, Asst. Chief Engineer, National Board of Fire Underwriters. Evolutions—Fire Chief Thos. D. Blake and squad of seven men, Rockford Fire Department.

THURSDAY, JUNE 19—Morning.

Electrical Hazards—Victor H. Touslay, Chicago. Salvage Work and Ventilation—Fire Chief Frank C. McAuliffe, Chief Fire Insurance Patrols, Chicago. Work of the State Fire Marshall—S. L. LeGreid, State Fire Marshall.

Afternoon.

Resuscitation, First Aid and Demonstrations—United States Bureau of Mines Car. (This car will be here for several days of the school.) First Aid Work and Demonstrations to be put on by some trained team in the Association. Evolutions—Fire Chief Thos. D. Blake and squad of seven men, Rockford Fire Department.

FRIDAY, JUNE 20—Morning.

Classification of Towns—R. E. Freeman, Engineer, Illinois Inspection Bureau. Fire Records—Peoria Fire Department. Group Discussion and Round Table Talks.

a. Problem in Cities.
Discussion led by Fire Chief Thos. D. Blake, Chairman, Rockford, Illinois; Fire Chief Mal Phillips, Chicago Heights, Illinois; Asst. Chief T. J. Ruddy, Joliet, Illinois.

b. Problem in Small Towns.
Discussion led by Dr. E. T. Robley, Chairman, Lockport, Illinois; B. D. Hurst, Fire Chief Millstadt, Illinois; Fire Chief Wm. Mace, White Hall, Illinois.

Afternoon.

Chemical Fire Extinguishers, Apparaus, Equipment, First Aid, Equipment and Their Use—Representative Underwriters' Laboratory, Chicago. Evolutions—Fire Chief Thos. D. Blake and squad of seven men, Rockford Fire Department.

Held Liable for Fire Damages

A jury in Lonoke county circuit court returned a judgement of $6,399.99 against Williams Bros., Inc., of Tulsa, Okla. for the loss of five business houses in a fire at Carlisle, Okla.

The plaintiffs contended that carelessness of Dave West, employee of the Williams organization caused the fire. West was in a building used by the company during the construction of a pipe line from Nonroe, La., to St. Louis, Mo., and was filling the tank of his auto with gasoline while a welder employed by the company was working on some pipe. The welding machine set fire to the gasoline and caused four frame building and some personal property to be destroyed.

Falmouth, Mass., to Erect Fire Houses—Falmouth, Mass., will soon erect two fire stations.

Ft. Fairfield, Me., Orders Apparatus—Fort Fairfield, Me., has placed an order for 1,000-gallon pumper.

Menno, S. D. Farmers Buy Apparatus—Farmers of Menno, S. D., have purchased a truck fitted with two 40-gallon chemical tanks and an 80-gallon booster tank.

The Blaze That Destroyed Three Hundred Cottages in the Oakwood Beach and South Beach Sections of Staten Island

WIND SPREADS SEVERE BRUSH BLAZES NEAR NEW YORK

Aid Sent from Manhattan Borough—Companies Concentrated on Two Sides of Staten Island—Change in Wind Saves Many Homes

THREE hundred buildings in the Oakwood Beach and South Beach sections of Staten Island, New York City, were razed by a brush fire that swept through the district with great rapidity. For the first time in years, the master alarm was sounded and aid was rushed to the island from the Borough of Manhattan.

On Saturday, the island was visited by a brush fire, the worst the county had known in twenty years. Firemen fought the flames for hours and finally at 2 a. m., the weary men departed from Rossville and Princes Bay with the belief that they had conquered in the battle that had destroyed four houses and a barn, and which had endangered several hundred other buildings.

At Sandy Grounds, a hamlet between Pleasant Plains and Rossville, 350 Negro families who had fled the day before were driven out again when a small blaze appeared in a patch of brush at Rossville. The wind, blowing from the northwest reached a velocity of fifty-five miles an hour and carried the flames in a westerly direction toward Pleasant Plains, Sandy Grounds, Princes Bay and Annadale.

An alarm for every piece of apparatus on the island went out, and the first engine reached Rossville as a spark flew into a 150-ton stack of hay piled up eighty feet on a farm at Arthur Kill Road. Flames leaped high into the air. The burning hay was blown onto the roof of Turner's garage in which fifty used cars were stored, and the garage was set afire. Some of the cars had been parked only recently and as the flames reached them the tanks exploded like a battery of field pieces. Four two-story barns on the Turner farm also burned. At 2:30 p. m., a fire was reported spreading through the marshland just north of South Beach, threatening 2,500 bungalows at the sea shore resort.

It was impossible for the Staten Island firemen to leave the west shore conflagration and the master alarm was sent to Manhattan fire alarm headquarters. Twenty pieces of apparatus were sent to the Battery and put aboard ferryboats, which made the seven and one-half mile run to St. George in the record time of twenty minutes. In another twenty minutes the companies were at South Beach to find a fifty-acre tract of brush and swampland covered by flames which were spreading towards the bungalow colony. Because of the swampy ground it was impossible to take the apparatus to within a half mile of the fire. Hose lines were run from the hydrants of South Beach.

Engines were parked in Seaside Boulevard and the men worked hard to save the 3,500 beach bungalows when the flames hit the first of a row of two hundred bathhouses at the Simplico Baths, just west of the residences. The bathhouses went up like so much paper boxes, but the bungalows were saved. The meadow blazes were extinguished and the ruins wetted down in three quarters of an hour.

As the firemen reeled in their hose and prepared to return to their headquarters, an alarm was received of a blaze at Oakwood Beach which threatened 1,000 small frame bungalows on the waterfront. Along the south shore it is only four and one-half miles from South Beach to Oakwood Beach, but as no road goes through the intervening marshland, it was necessary to follow a roundabout course back to Fort Wadsworth and along the boulevard to Oakland Beach.

The blaze started in the swamp just as men were going down to the beach to watch a baseball game. As the firemen arrived, panic-stricken home-owners rushed up to the firemen and begged that their homes be the first to be saved. Just as it appeared that the entire bungalow colony was doomed, the wind shifted from northwest to south, and the firemen aided by the fireboat Zopher Mills, were able to control the blaze.

The shift of wind aided the Staten Island companies struggling on the west shore. It came just as five hundred

One of the Fires Amid Three Miles of Brush on Staten Island

men with brooms were beating down the burning brush with brooms.

Companies stood by at Oakwood Beach and at the west shore towns until 11:30 p. m., prepared for any recurring blazes. Two of the companies from Manhattan were stationed in front of the borough hall in St. George to answer any alarms that might come in. In all twenty-one brush fires had started up in all parts of the island during the day.

Commissioner John J. Dorman took personal charge at South Beach and Oakwood Beach where three pieces of

apparatus sank up to their hubs in the mire and had to be hauled out by tractors, aided by a tank from Miller Field. Deputy Chief Frederick Mahoney was in charge of the Staten Island contingent on the west shore.

Police and firemen fixed the property loss at from $500,000 to $600,000.

In New Jersey ten counties combined to fight the most disastrous outbreaks in the state's history. More than sixty separate brush and forest fires were burning in the ten counties of southern New Jersey aided somewhat by winds. The counties most seriously affected are Atlantic, Camden, Cape May, Mercer, Monmouth, Salem, Burlington, Gloucester and Cumberland. Police are inclined to believe that some of the fires are of incendiary origin.

Oakwood Beach, Staten Island, After the Fire

Summer residents of the bungalow colony visited the ruins of their homes to see if they could find anything of value that was untouched by the flames.

The game warden stated that the wild game in Ocean County is now extinct or will be because of the food destroyed by the fires. About 35,000 men are being employed throughout the state to fight the blazes at $1.50 a day for meals and forty cents an hour for their work. Many Princeton University students left to join the ranks of the fire-fighters.

In Camden County which was raked by fire on Saturday and Sunday the shift in the wind threatened new towns. The Egg Harbor department appeared at Batsto on warning that the village was seriously endangered, but they left when the flames headed off in the direction of the cranberry bogs. According to reports about five thousand persons are homeless in Ocean County.

Ten fires have been reported on Long Island, ten in the Adirondacks section of New York state, five in the Orange-

Long Island Hotel Destroyed by Forest Fire

Ehler's Hotel was destroyed by sparks from the Brentwood, Long Island, forest fire. Above is a picture of the ruins.

Rockland counties, four in Dutchess, Putnam and Westchester counties and six in Renssalaer, Saratoga, Washington and Columbia counties. In New York state, outside of Staten Island, the worst damage seems to have been suffered on Long Island, particularly Suffolk county. One of the state parks was particularly hurt.

A peculiar problem exists on Long Island because of the large number of villages and local fire companies, the many persons who visit unincorporated areas during the week ends, the sandy soil, and the great area of scrub oak and pines. The Conservation Department blames roadside fires and spring cleanups around camps for the widespread blazes.

WHAT'S BURNING

THE following list includes fires of $25,000 loss and over in the United States and Canada, for the periods designated in the headings. These figures, compiled from telegraphic reports, are based on estimates made at the time, and are subject to later investigation and consequent revision. Taken as a whole, however, they give an approximately correct view of the losses incurred. The figures represent loss in thousand.

Week Ending May 2

CLEVELAND, OHIO.—Buckeye bldg., Prospect Ave..... 25
ROCHESTER, N. Y.—Bartholomew Brewery damaged..... 100
NASHVILLE, TENN.—Home of F. M. Bass destroyed..... 30
OSHTEMO, MICH.—Pine Crest Sanitarium destroyed..... 30
NISHAYUNA, N. Y.—Farm property of Albert Fink..... 25
DOTHAN, ALA.—Property of Alto Barnes Lumber Co..... 40
YATES, MO.—Consolidated school bldg. destroyed..... 25
PAKESLEY, ONT.—Mill of Pakesley Lumber Co., near here..... 50
DUBOIS, PA.—Roundhouse of Buffalo, Rochester & Pittsburgh R. R. 200
HOOSICK FALLS, N. Y.—Business property of D. J. Brown..... 40
ROXIE, MISS.—Plant of Mississippi Power & Light Co..... 25
McHENRY, MISS.—Garage of Bond Motor Sales Co..... 25
HOLYOKE, MASS.—Business and apartment block damaged..... 60
MONTCLAIR, N. J.—Former home of Col. C. H. Ingersoll..... 200
HOUSTON, TEX.—Plant of Henderson Cotton Co..... 80
DUMMOND, OKLA.—Business district..... 100
SAN FRANCISCO, CAL.—Bldg. occupied by Witzel & Baker..... 65
CHICAGO, ILL.—Refinery of Dabros Products Corp..... 125
WATERBURY, CONN.—Property of Woolen Mfg. Co..... 30
DELTA, UTAH.—Bldg. of Hub Mercantile Co..... 25
UHRICHSVILLE, OHIO.—Property of J. W. Lytle..... 50
HOMER, LA.—Ruple High School bldg. destroyed..... 40

Week Ending May 9

LOWELL, MASS.—Property owned by Claremont Trucking Co..... 45
BOSTON, MASS.—Whse. of Walworth Co..... 40
BROOKLYN, N. Y.—Apt. bldg. 215 Clinton St..... 25
WHITMAN, MASS.—Home of Mrs. H. H. Barrows destroyed..... 25
LOWELL, MASS.—Property of Daigle Bros. damaged..... 40
DELPHI, ONT.—Flour mills of Quance Bros., Ltd..... 60
POINT PLEASANT BEACH, N. J.—Carrollton Hotel destroyed..... 40
WATER VALLEY, MISS.—Garage of Chapman & Edgar..... 25
GARY, IND.—Yards of Northwest Side Lumber Co..... 25
MINNEAPOLIS, MINN.—Washburn apt. bldg. damaged..... 40
PECOS, TEX.—Justice Hotel, adj. property..... 150
ABILENE, TEX.—Garage of Southern Greyhound Lines, Inc..... 30
DETROIT, MICH.—John Ivory Storage Co., adj. property.....$300,000
ALAMOSA, COLO.—Alamosa High School Bldg..... 125,000
WALTHAM, MASS.—Middlesex Convalescent Home 30,000
MACOMB, ILL.—Lunchroom, and adjoining stores..... 25,000
MARYSVILLE, OHIO.—Plant of Federal Brass & Mfg. Co..... 200
ALLEGHENY, N. Y.—Monastery at St. Bonaventure College..... 350
VALLEY FORGE, PA.—Dairy barn of R. K. Scott..... 80
NORFOLK, VA.—Pier 7, Hampton Roads Naval Base..... 200
AUGUSTA, GA.—McClellan store and adj. property..... 400
MONTE VISTA, COLO.—Business property damaged..... 250
WASHINGTON, N. C.—Whses. of Bright Leaf Tobacco Co..... 150
WEOGULFKA, ALA.—Weogulfka High School bldg. 25
TIFFIN, OHIO.—Achre business block damaged..... 80
SCOTTSVILLE, KY.—Business property destroyed 40
BRUNSWICK, GA.—Coastal Cabinet Works destroyed..... 30
HAMPTON, VA.—Sheds of Heffelfinger Co., adj. property..... 30
SEAT PLEASANT, MD.—F. L. Watkin's store, adj. bldg. 125
BAYONNE, N. J.—Plant of Gulf Refining Co. 2,500

Lumber Yard Fire in Louisville

In the April 30 issue was a description of a three-alarm fire in a lumber yard in Lexington, Ky. The incident should have been credited to Louisville.

Dominion Chiefs to Meet in September

Plans have been made for the twenty-second annual convention of the Dominion Association of Fire Chiefs which will be held in Port Arthur, Ontario, Canada, September 2-5, one week prior to the I. A. F. C. convention in Winnipeg.

Armories have been secured for the display of manufacturers exhibits, and space may be reserved by writing to Chief R. McLeod, Port Arthur, or A. S. Kappele, Chairman of the Exhibit Committee, Stratford, Ontario, Canada. Full information concerning custom entry can be obtained from Chief McLeod, and exhibits can be shipped Port Arthur in ample time for the Winnipeg convention.

Minnesota Starts Forest Fire Campaign—Gov. Christianson, of Minnesota, has made a state wide appeal to check forest fires. During the past year, 380,000 acres of timber were destroyed.

NEW JERSEY CHIEFS URGED TO SEARCH FOR PRACTICAL DATA

Quarterly Meeting in New Brunswick Draws Large Attendance Despite Serious Brush Fires in Southern District of State

CHIEF John Towey, head of the fire department at Newark, N. J., was the principal speaker at the quarterly meeting of the New Jersey State Fire Chiefs' Association held in New Brunswick, May 7. The registration indicated that nearly 150 persons were present, and this was considered a remarkable showing because of the brush fires in the southern part of the state that had occupied the attention of fire departments for many days.

Chief John Towey

The invocation was given by Mons. Peter S. Hart of St. Peters Parish, New Brunswick. The chiefs were welcomed by the Hon. John J. Morrison, mayor of the city. Fire Commissioner George Bayer amplified the welcome extended by the Mayor and told of his long-felt desire to return the courtesies that had been extended to him at various meetings of the association. Chief Charles Greenfield, president of the association, replied to the welcoming talks.

At present the association has 791 members and has $12,083 in the treasury. Three members have passed away—T. Howell Johnson, Newark; Andrew C. Ogden, Kennilworth and John Rothwell, South Brigantine.

Chief Towey in his talk on "Practical Fire Fighting" said that man power, apparatus and water are the three essential things in successful fire department operation.

It is necessary for each chief to go out and get things for himself and not to rely too much on office correspondence. When he became head of his department, he made a personal survey of the hydrant distribution, in company with officials of the water department. In one instance eight hydrants were placed to serve a stretch of two miles, in an area that is sure to develop into an important industrial center. Now the condition has been corrected by the installation of thirteen additional hydrants. In placing hydrants, there should be no stretch greater than five hundred feet. In Newark there are two men whose sole duties are to look after the hydrants.

Tests have been made on standpipes in some of the larger office buildings to determine what conditions would confront the department in case of fire. The standpipes were supplied by pumpers and the results noted. Each chief should, by actual test, become acquainted with the local conditions in his city. In fighting fires above the fifth floor, it is best to hook as many pumpers as possible to the standpipes.

Relief valves are set at 120 pounds pressure, but when long stretches of twenty lengths of hose are made, it is necessary to readjust the relief valve to about 175 pounds so that better streams could be obtained. On such lines, the larger tips should be taken off and 1-inch tips used.

Perhaps the most important thing in the fire department today is ventilation. In opening up, it is important not to let fire enter adjoining buildings. Extra hose lines should be kept handy as additional insurance. By proper ventilation, it is possible for the firemen to follow up the blaze with hose lines at very close range, and the men will be able to work inside.

It should be remembered that fires can not be fought from the street, and that being human, firemen will not work inside if conditions are unbearable. They should be provided with the equipment that will enable them to do this—gas masks, smoke protectors and oxygen helmets. It is the duty of every fire chief and commissioner to see that his department is supplied with the necessary equipment.

The essence of the talk was that practical experience is the best thing in the world.

Through the courtesy of the Pyrene Manufacturing Co., a demonstration was given of a standard motion picture machine equipped so that should a fire break out in the machine from the film, the fuse on a cartridge in the machine goes off, and pyrene fluid is forced into the magazine chambers, automatically opens the switch and thereby stops the machine from running, and drops a shutter which prevents the light from the arc from heating the film. The fluid is said to be in no way detrimental to the motion picture film.

Luncheon was served in the new Woodrow Wilson Hotel. At the luncheon Rev. Dr. Wm. H. S. Demarest spoke on the "200th Anniversary of New Brunswick," which will be formally observed by parades and pageants in October. He spoke of the association of New Brunswick with American history.

At the afternoon session, Captain Morris Abel, drill master of Atlantic City, N. J., fire department spoke on "Drill and

Those Present at Quarterly Meeting, New Jersey Fire Chiefs' Association

Morris F. Abel, Drill Master, Atlantic City, N. J.
Chas. M. Allen, Basking Ridge, N. J.
John W. Ambrose, Arbor, N. J.
Elias S. Amerman, Morristown, N. J.
H. Van Arsdale.
F. W. Atkinson, Moorestown, N. J.
George T. Baier, New Brunswick, N. J.
John Banker, Ex-Chief, New Brunswick, N. J.
John F. Barry.
Harry J. Becker, South Orange, N. J.
E. G. Beckert, West New York, N. J.
Chas. Biegner, Harrison, N. J.
G. R. Bodine, Long Branch, N. J.
Capt. C. Bolden, Ocean City, N. J.
Water J. Bond, Union, N. J.
H. A. Breder, Egg Harbor, N. J.
Henry W. Breder, Jr., Egg Harbor City, N. J.
T. F. Burke, Carteret, N. J.
Chas. E. Burr, Bordentown.
A. T. Canahan, Harrison.
H. Campbell, Irvington.
Peter B. Carter, Camden.
James H. Cavanaugh, Madison.
Albert Chamberlan, Hillside.
Chief Henry A. Christ, Milltown.
Geo. J. Coghlan, Morristown.
Thomas A. Cohern, Harrison, N. J.
Chas. S. B. Conver, Ocean City.
F. P. Crater, Gladstone.
John J. Culliman, Chief, Morristown.
R. B. Dickson, Asst. Gen. Sales Mgr., Pyrene Mfg. Co., Newark.
Clarence H. Dongal, Livingston.
Chief Wm. Duff, Carteret.
W. J. Dunn, Plainfield.
Capt. N. R. Dunphy, Rahway.
N. S. Erhart, New York City.
Wm. Exall, Newark.
Estelle M. Finnerty, Bloomfield, N. J.
Harry Francis, New Brunswick.
Ex-Chief Henry J. Gantschy, Hawthorne.
Ang. Gerstung, Chief, Elizabeth, N. J.
Chas. M. Gettegan, Port Reading.
Chief Gethri Gibbs, Montclair.
Valentine Gierkner, Carteret.
Frank Gloor, Boro of Totowa.
Frelan M. Green, Morristown.
Chas. W. Greenfield, President, Arlington.
Fireman Wm. J. Groeger, Hillside.
Herbert J. Groom, Englishtowa.
Ex-Chief Samuel A. Gruver, Madison.
Albert Hackney, Capt. Margate City Fire Dept.
Chris H. Hasselbruhn, Carlstadt.
Frank A. Heggins, New Brunswick.
B. Helmlinger, So. Orange.
E. A. Helmlinger, South Orange.
Elmer Hewitt, North Wildwood.
Fred Hoch, Supt. Fire Alarm, Irvington.
Wm. C. Hoffman, Ocean City.
Ralph T. Holman, New Brunswick.
John Horn, New Brunswick.
Charles F. Johnson, 411 Cleveland Ave., Harrison.
E. J. Johnson, Harrison.
Lambert K. Jackson, Long Branch.
James T. Keegan, Newark.
William Kelly, New Brunswick.
Batt. Chief Peter Kierman, Newark.
J. L. Killney, New Brunswick.
Engineer John J. Klein, New Brunswick.
John H. Klotzbach, Mayor, Milltown.
Frederick H. Knapp, R. C. A. Radiotron Corp., Harrison.
George E. Koeber, Chief Fire Dept., Bloomfield.
Andrew G. Koehler, Somerville.
Edward Kirchner, Clifton.
E. Lefkowitz, Interstate Coupling Co., Carteret.
A. B. Lembeck, Demarest.
Geo. E. Liming, Highlands.
Edward Loudre, Riverside.
John J. Harterson, North Caldwell.
Clieffford E. Massey, Lumberton.
Mr. Fred R. Mauky, Wood Bridge.
Gus E. Medvetz, Carteret.
E. W. McAllister, Moorestown, N. J.
Walter McClain, Chief, Medford.
E. M. McCool, Mine Safety Appliances Co., Bloomfield.
John B. McGrath, Madison.
John A. McIntyre, Morristown.
James J. McMillan, Chief, Orange, N. J.
Charles E. Miller, Jr., Margate City.
Frank Miller, Linden.
G. W. Miller, Montclair.
J. Miller, Margate.
V. T. Miller, Manasqua.
Geo. L. Mitchell, East Orange.
J. Paul Moore, Newark.
George T. Mortimer, Thomas Oakes & Co., Bedford.
M. C. Murphy, New York City.
Andrew E. Nelson, Long Branch.
Peter Newallis, Elizabeth.
Wm. O'Neill, Weehawken.
Chas. L. Nickerson, Wildwood.
H. C. Opdyke, Keansburg.
Theodore M. Pennock, Mt. Holly.
Peter Peterson, Port Reading.
J. H. Petz, Long Branch.

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Those Present at Quarterly Meeting, New Jersey Fire Chiefs' Association

(*Continued from page* 411)

Henry M. Phillips, Hammonton.
Knowlton F. Pierce.
A. V. Pierson, Hightstown.
Clarence B. Poland, Manasquan.
Olive B. Presbey, Long Branch.
William Proff, Carteret.
Thomas Pryor, Dunellen.
Richard D. Quinn, Livingston.
Andrew J. Rhine, New Brunswick.
K. V. Ridley, Teaneck.
Adam A. Ritter, Engr., Clifton.
Chief W. H. Ritzman, Rahway.
T. H. Ryan, Harrison.
Louis Sass, New Brunswick.
Charles Schroeder, South River.
F. A. Schultz, Hasbrouck Heights, N. J.
Joseph Schwark, Long Branch.
H. Schwerckhardt, Newark.
Frederick Schweitzer, Garfield.
Rudolph Shamberger, Garfield.
James J. Shehan, West Orange.
Harry Smith, Highlands.
Asst. Chief R. L. Smith, Ocean City.
William J. Smith, Bridgeboro.
H. H. Stager, Nutley, N. J.
O. W. Steidel, Ex-Chief, Hasbrouck Heights
Nichola Swetman, Pequannock
Fred A. Trowbridge, Sec., Morristown
Asst. Chief Geo. F. Van Derveer, New Brunswick
Wm. Walker, New Brunswick
Harold K. Whitaker, Woodbridge.
Chas. N. White, Long Branch.
Harry A. Wierenger, Plainfield.
Robert Winters, Carteret.
I. R. Wilson, Madison.
N. N. Wolpert, Asst. Editor, FIRE ENGINEERING.
H. S. Worman, Boonton.
Wm. P. Worth, Highlands.
Wm. Ziegler, Hackensack.

Training." He stressed the importance of having a drill master who is endowed with an infinite amount of patience. At many of the drill schools that he had visited, it was a common thing to find a drill master who considered his men as just so many dogs. It is first necessary for the drill master to take fear out of his men, and when once this is done, instruction is much easier. Men come to the department for instruction from various callings, and although a man may seem hopeless when it comes to gaining the good of the school, yet one must remember that in his chosen trade, he may be a specialist.

The department should take more advantage of the radio. During the winter months, fire department facts or information on fire prevention should be broadcast.

During the business part of the meeting a resolution was adopted that all of the present officers come up for re-election at the annual convention which will be held in Atlantic City in September.

CHIEF DANIEL F. SENNOTT OF BOSTON TO BE PENSIONED

Will be Succeeded on May 26 by Assistant Chief Henry A. Fox—Retirement Age of Sennott Forces Change in Department

By HARRY BELKNAP

ON May 26 Chief Daniel F. Sennott, of the Boston, Mass., Fire Department will be retired on pension, having reached the age of seventy years when all municipal employes of Boston are automatically placed on the retired list.

Mayor James M. Curley has announced that Assistant Chief Henry A. Fox will be appointed Chief of Department as successor to Sennott.

Henry A. Fox, Who Will Be New Chief of Boston

Chief Sennott became head of the Boston Fire Department in 1924 after the death of Chief John O. Taber. He was born May 26, 1860, and joined the fire department as a call man in 1882, being assigned to Engine 27 in the Charlestown district. He was made a permanent fireman in 1884; became a lieutenant in 1887; was promoted to rank of captain in 1889; and to district chief in 1905. In 1915 Sennott was made junior deputy chief in charge of Division 2 with headquarters at the house of Ladder Co. 4 on Dudley Street. In March, 1923, he was advanced to assistant chief, a newly created position, and when Chief Taber died he was made Chief of Department. During Sennott's regime many improvements have been made in the Boston department and a number of new fire-houses have been built. One of the worst fires he had to contend with was the burning of the Back Bay Railroad Station two years ago.

Henry A. Fox was born in Boston on Nov. 18, 1866, and attended the Phillips Grammar School. He later went to the Farm and Trade School on Thompson's Island. He worked in a grocery store for a time; but even as a boy the fire department held a fascination for him.

He used to frequent the old Mason Street firehouse and was the youngest fireman in the ranks when he joined the Boston department on Oct. 15, 1886. He served with Engine 4, Engine 26, and Engine 25, being driver of the three horse hitch at the Fort Hill Square fire-house. He was promoted to lieutenant and later to captain and assigned to command Engine 12 on Dudley Street. He advanced in turn to District Chief and Deputy Chief and finally to Assistant Chief under Sennott. During the absence of the latter he has often served as acting chief of department and was in charge of the battle with the spectacular 3-alarm fire in the Masury paint and varnish store in the State Street block a few years ago. Fox has been injured several times at big fires and has had many thrilling experiences during his career as a Boston fireman.

In 1897 Fox married Miss Clara Bradbury. Chief Fox and his wife make their home on High Rock Way in Allston and have a pet tiger cat named "Mike" of which they are very fond. They formerly owned a white Persian cat that won the first prize in many cat shows where it was exhibited.

The new chief is known as an experienced and able fire fighter with progressive ideas and his appointment is a popular one. The *Boston Traveler* commented editorially on the appointment of Chief Fox as follows:

"There are several high officers of the fire department well qualified to serve as chief. Because of the contemplated retirement of Chief Sennott, the mayor was faced with the problem of appointing a successor. He meets the difficult task with courage and makes an announcement that will receive as general approval as is possible under such circumstances.

"Mayor Curley says that he will appoint Henry A. Fox to command the department. This choice carries with it not the slightest reflection on other men high in command. However, it is an excellent appointment because practically every officer and man in the department will admit that there is no man who knows more about the job than does Henry Fox. Not only is he a competent fireman; he has the respect and friendship of the members of the department.

"From the point of view of fire prevention and fire fighting, the proposed appointment is excellent; from the point of view of the morale of the department, it is equally good."

Program of New Mexico Fire School

A fire college will be held in connection with the eighth annual convention of the New Mexico State Firemen's Association at Deming, N. M. T. A. Rosenwald, Albuquerque, N. M., is Secretary of the association, and any question concerning the school should be addressed to him.

Following is the complete program that has been arranged for the fire college:

Wednesday, June 4.

9 a.m.—Registration of Members.
9:30 a.m.—Call to Order, Chief P. D. Miller, President. Roll Call.
9:45 a.m.—Address of Welcome, Mayor of Deming.
10 a.m.—Response, Chief P. D. Miller, President
10:15 a.m.—Reading of the minutes of the previous meeting and report of the secretary-treasurer. T. A. Rosenwald, Secy-Treas.
10:30 a.m.—Appointment of special committees.
10:45 a. m.—Address, "The Fire College," Dean R. S. Rockwood, University of N. M., Albuquerque, N. M.
11:15 a.m.—Dean R. S. Rockwood, University of N. M., Director of Course.
12 m.—Luncheon. Group photo to be taken immediately after luncheon. This will be followed by a parade, led by the Clovis Fire Dept. Drum Corps.
2 p.m.—Ladder and Drill Tower Evolutions. Group 1. Chief Harry K. Rogers, Western Actuarial Bureau, Chicago, Ill.
2 p.m.—Practical Pumper Operations, Group 2. Mr. Fred Warner. Master Mechanic, Denver Fire Dept., Denver, Col.
7 p.m.—Banquet.

(*Continued on page* 417)

CONVENTION DATES

May 12, week of—NATIONAL FIRE PROTECTION ASSOCIATION. 34th Annual Meeting, Atlantic City, N. J. 1931 Convention probably to be held in Toronto, Can. Managing Director, Franklin H. Wentworth, 60 Batterymarch St., Boston, Mass.

May 14—DEL-MAR-VA. VOLUNTEER FIREMEN'S ASSOCIATION. 1st Annual Convention, Cambridge, Md. Secretary, J. Emory Parks, Cambridge, Md.

May 19-23—KANSAS STATE ASSOCIATION OF FIRE CHIEFS, STATE FIREMEN'S ASSOCIATION and FIRE SCHOOL. Respectively, 14th and 43d Annual Convention and 2nd Annual Fire School, Salina, Kan. Secretary, Chief K. D. Doyle, Wamego, Kan. Secretary, Firemen's Short Course Committee, E. J. Stewart, Kansas Insp. Bureau, 701 Jackson St., Topeka, Kan.

May 28—WESTCHESTER COUNTY FIRE CHIEFS' EMERGENCY PLAN. Dinner Meeting. "Westchester Manor," Westchester Ave. and Hutchinson River Parkway Extension, White Plains, N. Y., 7:30 p.m. Secretary-Treasurer, Lieut. E. Riviere, 42 Woodbine Ave., Larchmont, N. Y. Also address Chief Arthur Steuhl, Bronxville, N. Y.

June—HUDSON VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 41st Annual Convention, Rensselaer, N. Y. (Date to be set later.) Secretary, Pierce D. Kane, Averill Park, N. Y.

June 2-4—OKLAHOMA STATE FIREMEN'S ASSOCIATION. 36th Annual Convention, Tulsa, Okla. Secretary-Treasurer, Charles Slemp, 820 East 19th St., Oklahoma City, Okla.

June 2-6—AMERICAN WATER WORKS ASSOCIATION. 50th Annual Convention, Hotel Jefferson, St. Louis, Mo. Secretary, Beekman C. Little, Rochester, N. Y. Offices of the Association, 29 West 39th Street, New York City.

June 4-6—NEW MEXICO STATE FIREMEN'S ASSOCIATION. 8th Annual Convention (Combined with Firemen's Short Course), Deming, N. M. Secretary-Treasurer, Theodore A. Rosenwald, Albuquerque, N. M.

June 7—LANCASTER COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Elizabeth, Pa. Secretary, J. Harry Grube, Landisville, Pa.

June 9-10—EASTERN ASSOCIATION OF FIRE CHIEFS. 3rd Annual Convention, Lord Baltimore Hotel, Baltimore, Md. Secretary, F. E. Soulé, Coatsville, Pa.

June 9-11—SOUTH CAROLINA STATE FIREMEN'S ASSOCIATION. 25th Annual Convention, Beaufort, S. C. Secretary, R. S. Hood, Sumter, S. C.

June 9-11—NEW YORK STATE ASSOCIATION OF FIRE CHIEFS. 24th Annual Convention, Utica, N. Y. Secretary-Treasurer, Chief J. H. Golden, Fire Department, Cohoes, N. Y.

June 10-11—MINNESOTA STATE FIRE DEPARTMENT ASSOCIATION. 58th Annual Convention, Excelsior, Minn. Secretary, Chief Fred Pfaender, New Ulm, Minn.

June 10-12—OHIO FIRE CHIEF'S ASSOCIATION. 13th Annual Convention, Portsmouth, Ohio. Secretary, Chief Philip J. Hardy, Fire Department, Youngstown Sheet and Tube Company.

June 10-13—SOUTHERN NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. 35th Annual Convention, Long Beach, L. I. Secretary, Theodore W. Nass, Lindenhurst, L. I., N. Y.

June 11-13—MARYLAND STATE FIREMEN'S ASSOCIATION. 38th Annual Convention, Lord Baltimore Hotel, Baltimore, Md. Secretary, George R. Lindsay, Hagerstown, Md.

June 11-13—WISCONSIN STATE FIREMEN'S ASSOCIATION (Volunteer). 43rd Annual Convention, Plymouth, Wis. Secretary, E. Philip Mueller, Jefferson, Wis.

June 11-14—EASTERN WISCONSIN FIREMEN'S ASSOCIATION. Convention and Tournament, Plymouth, Wis.

June 13-14—DELAWARE COUNTY FIREMEN'S ASSOCIATION. 24th Annual Convention and Parade, Linwood, Pa. Financial Secretary, William E. Wunderlich, Lansdowne, Pa.

June 13-14—DAUPHIN COUNTY FIREMEN'S ASSOCIATION. 12th Annual Convention, Steelton, Pa.

June 16-20—SIX COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Danville, Pa.

June 17-20—SHORT COURSE ON FIRE PREVENTION, CONTROL AND EXTINGUISHMENT. 6th Short Course, University of Illinois, Champaign-Urbana, Ill. Address, Prof. C. C. Palmer, Director of Course, Architectural Bldg., at the University.

June 20-21—FOUR-COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Easton, Pa.

June 24-27—WISCONSIN SHORT COURSE IN FIREMANSHIP. 2nd Short Course at the State University, Madison. Address, Prof. H. E. Pulver, at the University.

June 24-25—SOUTHEASTERN ASSOCIATION OF FIRE CHIEFS. 3rd Annual Convention, Charlotte, N. C. President, Sherwood Brockwell, Insurance Department, Raleigh, N. C.

June 24-27—NEW ENGLAND ASSOCIATION OF FIRE CHIEFS. 8th Annual Convention, Hotel Berwick, Rutland, Vt. Meetings, Odd Fellows' Hall; Exhibits, Armory. Secretary-Treasurer, Chief John W. O'Hearn, Watertown, Mass.; Chairman, Exhibits, Chief Daniel B. Tierney, Arlington, Mass.; Traffic Manager, George F. Cobb, Boston.

July 3-5—COLORADO STATE FIREMEN ASSOCIATION. 14th Annual Convention and Tournament, Salida, Col. Secretary, Clinton Turnbull, 303 Jacobson Bldg., Denver, Col.

July 7-10—MICHIGAN STATE FIREMEN'S ASSOCIATION. 56th Annual Convention and Fire College, South Haven, Mich. Secretary-Treasurer, H. L. Williams, Ludington, Mich.

July 9-10—DELAWARE VOLUNTEER FIREMEN'S ASSOCIATION. 10th Annual Convention, Georgetown, Sussex County, Del. Secretary, Sam H. Carson, Dover, Del.

July 14-15—MONTANA STATE FIREMEN'S ASSOCIATION. 39th Annual Convention, Missoula, Mont. Secretary-Treasurer, D. E. Moser, Bozeman, Mont.

July 16—NASSAU COUNTY FIREMEN'S ASSOCIATION. 25th Annual Parade and Tournament, Inwood, L. I., N. Y. Parade, 9:30 A. M.; Tournament, 1:30 p.m. Secretary, J. W. Sane, Glen Cove, L. I.; Chairman Tournament, Henry W. Buck, Westbury, L. I.

July 22-23—WESTERN NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. 30th Annual Convention, Rochester, N. Y. Secretary, Henry A. Clark, Batavia, N. Y.

July 29-31—INDIANA FIREMEN'S ASSOCIATION. 13th Annual Convention, Lafayette, Ind. Secretary, Clem Smith, Fire Headquarters, Terre Haute, Ind.

July 30-31—CENTRAL NEW YORK FIREMEN'S ASSOCIATION. 37th Annual Convention, Skaneateles, N. Y. President, C. W. McCray, Waverly, N. Y.; Secretary, T. J. Murray, Cortland, N. Y.

July 31-Aug. 1-2—CALIFORNIA STATE FIREMEN'S ASSOCIATION. 8th Annual Convention, San Francisco, Cal. Secretary-Treasurer, H. E. Strasser, 1171 Tenth Street, San Diego, Cal.

August—MAINE STATE FIREMEN'S ASSOCIATION. 3rd Annual Convention, Bangor, Me. (Date to be set later.) Secretary, Earl E. Pratt, Auburn, Me.

August—UTAH STATE FIREMEN'S ASSOCIATION. 23rd Annual Convention, Provo City, Utah. (Exact date to be decided later.) Secretary, Charles A. Canning, Midvale, Utah.

Aug. 6-7—CUMBERLAND VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 30th Annual Convention, Shippensburg, Pa. Secretary, C. L. Jacobs, Waynesboro, Pa.

Aug. 6-8—WASHINGTON STATE FIREMEN'S ASSOCIATION. 8th Annual Convention, Kelso, Wash. Secretary, H. S. Jenkins, Bellingham, Wash.

Aug. 12-14—WISCONSIN PAID FIREMEN'S ASSOCIATION. 23rd Annual Convention, Two Rivers, Wis. Secretary-Treasurer, William H. Schultz, Sheboygan, Wis.

Aug. 12-15—WYOMING STATE FIREMEN'S ASSOCIATION. 4th Annual Convention and Tournament, Caspar, Wyo. Secretary, Chief Justin H. Patrick, Laramie, Wyo.

Aug. 15-16—CONNECTICUT STATE FIREMEN'S ASSOCIATION. 47th Annual Convention, Pyramid Lodge, 1035 State St., Bridgeport, Conn. Secretary, D. W. Harford, 10 Chestnut St., South Norwalk, Conn.

Aug. 19-22—FIREMEN'S ASSOCIATION OF THE STATE OF NEW YORK. 58th Annual Convention, Nyack, N. C. Secretary, Fred A. Davis, Drawer X, Fort Edward, N. Y.

Aug. 27-29—VIRGINIA STATE FIREMEN'S ASSOCIATION. 44th Annual Convention, Phoebus, Va. Secretary, E. K. Landis, Pulaski, Va.

Sept. 1-4—PACIFIC COAST ASSOCIATION OF FIRE CHIEFS. 37th Annual Convention, Oakland, Cal. Secretary, Jay W. Stevens, 1014 Merchants' Exchange Building, San Francisco, Cal.

Sept. 2-4—KENTUCKY FIREMEN'S ASSOCIATION. 11th Annual Convention, Paducah, Ky. Secretary, Capt. S. G. Render, 940 Starks Bldg., Louisville, Ky.

Sept. 2-5—DOMINION ASSOCIATION OF FIRE CHIEFS. 22nd Annual Convention, Port Arthur, Ont. Secretary, Chief James Armstrong, Kingston, Ontario, Can. Exhibit Space, Chief A. S. Kapelle, Stratford, Ont.

Sept. 9-11—ILLINOIS FIREMEN'S ASSOCIATION. 43rd Annual Convention, Peoria, Ill. Secretary, Assistant Chief Roy W. Alsip, Fire Department, Champaign, Ill. Exhibits, Chief Albert Herring, Fire Department, Murphysboro, Ill.

Sept. 9-12—INTERNATIONAL ASSOCIATION OF FIRE CHIEFS. 58th Annual Convention, Hotel Royal Alexandra, Winnipeg, Man., Canada. Recording Secretary, Chief James J. Mulcahey, Yonkers, N. Y.; Executive Secretary, Jay W. Stevens, 1014 Merchants' Exchange Bldg., San Francisco, Cal.; Chairman, Exhibit Committee, Chief Charles Alt, Fire Headquarters, St. Louis, Mo. Hotel Reservations, Chief D. A. Boulden, Winnipeg, Man.

Sept. 16-17—IOWA FIREMEN'S ASSOCIATION. 53rd Annual Convention, Boone, Ia. Secretary, Paul Soener, Independence, Ia.

Sept. 16-18—MASSACHUSETTS STATE FIREMEN'S ASSOCIATION. 51st Annual Convention, Pittsfield, Mass. Secretary, Daniel J. Looney, Room 1043, Old South Bldg., Boston, Mass.

Sept. 24-25—MISSOURI STATE FIREMEN'S ASSOCIATION. Annual Convention, Trenton, Mo. Secretary-Treasurer, M. J. Mulvoy, 3500 S. Grand Boulevard, St. Louis.

Oct. 7-9—FIREMEN'S ASSOCIATION OF THE STATE OF PENNSYLVANIA. 51st Annual Convention, Hotel Americus, Allentown, Pa. Secretary, Charles E. Clark, 411 Bellevue Avenue, Wayne, Pa.

Oct. 8-9—WISCONSIN STATE FIRE CHIEFS' ASSOCIATION. 2nd Annual Convention, Sheboygan, Wis. Secretary, Chief Arthur J. Rahn, Fire Department, Two Rivers, Mich.

Oct. 21-23—NEBRASKA STATE VOLUNTEER FIREMEN'S ASSOCIATION. 49th Annual Convention (2d in year), Scottsbluff, Neb. Secretary-Treasurer, H. A. Webbert, Kearney, Neb.

November—SONOMA COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Petaluma, Cal.

Fire Fighters to Meet in Halifax

The tenth annual convention of the International Association of Fire Fighters is to be held in Halifax, Nova Scotia, Canada, September 2-6. The Halifax Fire Fighters' Association of which James W. Cody is secretary has an active part in arranging for the coming gathering.

Carmel, Cal., to Buy Apparatus—Carmel, Cal., has voted to issue $15,000 bonds for the purchase of fire apparatus.

Headquarters Urged for Newark, N. Y.—The construction of a new department headquarters building has been urged for Newark, N. Y.

Protection for Rural Areas—Plans are under way in Oklahoma to obtain legislation permitting county commissioners to buy necessary apparatus for fighting fires in the rural districts. Under the proposed plan the apparatus would be kept in the city stations and manned by members of the city department and volunteers.

The Round Table

(*Continued from page 404*)

Jack Ary, Chief, Drumright, Okla.: I believe publicity is a good thing for the department and it is for this reason that we seek it. Our local newspapers are always willing to give us space for any fire department news or cautions which we might wish to bring before the public. We have found that short snappy front page items are read by the majority of people we wish to reach and therefore do a lot of good in eliminating traffic hazards or other problems pertaining to fire fighting.

Wm. O'Neill, Chief, Weehawken, N. J.: We certainly endeavor to get all the publicity we can. Every matter handled by the fire department is of vital importance to the public. Therefore the more writeups we can get, the more reason there is for us to feel that the people are obtaining a better understanding of fire department matters.

Our newspapers are always ready and willing to help us in any way possible.

W. P. Weeks, Chief, Battle Creek, Mich.: While we do not seek publicity in the way of frequent write-ups, etc., we do try to give the newspapers all the current news about the fire department. This we find proves very satisfactory.

Andrew Batsch, Chief, Ravenna, Ohio: I do attempt to get publicity for the department on fires regardless of how small or large they are. Frequent write-ups keeps the public informed as to just what the department consists of it and data regarding the equipment and activities.

John E. Saulnier, Chief, North Adams, Mass.: I try to get all the publicity I can for my department. Frequent articles in the local papers have a tendency of keeping the public posted on the life of a fireman, which is very often greatly misunderstood. The general public under stand very little about the great hazards that are encountered in the fire fighting profession.

The press in our city is always glad to print any news that the fire department might have. We receive splendid cooperation from them.

Ronald W. Cameron, Chief, Eureka, Cal.: Newspaper writeups certainly are a great help in creating a better understanding of fire department matters.

Our local papers have been more than generous in giving the department publicity regarding fires, first aid work, false alarms, incendiary fires and social affairs. I believe this has a tendency of keeping the fire department in closer touch with the public.

R. W. Maxwell, Chief, Clarksdale, Miss.: Yes, I do get some publicity from the newspapers. I believe frequent write-ups in the papers help the department in keeping the public informed as to fire fighting activities. Our department has been praised through the local papers and I do believe this helps.

C. Blom, Jr., Fire Marshal, Holland, Mich.: While we do actually seek publicity, I do believe that this is the best medium of education with regard to public needs. Our papers are a great help in fire prevention and are ardent boosters for improvements in fire protection.

August Emrich, Chief, Baltimore, Md.: Publicity is a good thing for any fire department and for this reason we try to keep the work of the department before the public. Our newspapers have aided us greatly in attaining this end by their excellent cooperation.

W. O. Aldrich, Chief, Whitinsville, Mass.: We do not try to get publicity for the department as the newspapers have not shown very much cooperation. They are more anxious to knock than boost.

S. L. Rodger, Chief, Olean, N. Y.: While we do not attempt to get publicity, we are certainly in favor of articles and write-ups as they do help the department. Our own newspapers are very quick to criticize the department and for this reason we have very little to do with them.

Chas. P. Loller, Chief, Hamden, Conn.: I find that we get very good results by warning the public through the press regarding the danger of rubbish burners creating grass fires this time of the year.

Napoleon Belfy, Chief, Muskegon, Mich.: We only try to secure publicity regarding matters pertaining to fire prevention and extinguishment.

We have been fortunate in receiving good cooperation from the press at all times.

C. H. Russell, Chief, Kalamazoo, Mich.: I believe we should do our work in such a manner that the public will naturally notice it.

R. J. Scott, Chief, Los Angeles, Cal.: We try to get all the publicity we can for the department as it certainly is of benefit in creating a better understanding of fire department matters.

Our newspapers give us very good cooperation.

W. N. Bates, Chief, Elyria, Ohio: Publicity is an excellent means of keeping the public informed of fire department activities. We therefore try to secure all we can.

The press is always willing to cooperate in matters of fire prevention and protection.

Answer to Previous Question

Rolla Neal, Fire Marshal, Bloomington, Ill.: Our hose threads are seven threads per inch. At the present time we have no information regarding any change.

The threads we are using correspond with Peoria and Springfield. In case of an emergency we help each other.

W. J. Dessin, Chief, Burlingame, Cal.: We hold an annual dance and have educated the public to support us, for we have but one ticket sale a year. We have had no experience with carnivals or shows, but doubt if they would bring the necessary returns.

Fred Master, Chief, Lyons, Ill.: Shows and carnivals do not pay. We have tried a house-to-house canvass with good results, but that can not be done very often.

T. S. Ward, Chief, Red Bluff, Cal.: Funds for the maintenance of this department are obtained in two ways. Once a year we hold our annual ball, which falls on New Year's Eve. It brings in a fairly large sum. Our annual ball entails lots of work.

The easiest way to raise money is by booking all the carnivals that come along on a flat guarantee, no percentage. All you have to do then is to collect the money. Generally, the money raised this way is sufficient to run the department throughout the year, but we do not buy equipment. That is purchased by the city.

N. D. Rowland, Chief, Elizabeth, Pa.: Funds are raised with the aid of carnivals. We have done exceptionally well with all our street fairs and carnivals thus far.

R. W. Van Tassel, Chief, Lindale, Ga.: Our fire department is owned by the Pepperell Manufacturing Company. All I have to do is to ask and I receive. I do not believe carnivals and shows pay for the bother they necessitate.

Wm. C. Cook, Chief, Ewing, N. J.: We receive a little money from the township. Our carnivals and shows do not pay our expenses. Each member pays three dollars a year dues and at the end of each year we have to donate a little more.

W. F. Ingold, Chief, Edgewater, N. J.: All funds for the operation of the department are raised by the town through taxation. We have no volunteers.

Walter A. Armstrong, Chief, Riverton, N. J.: Like all other volunteer organizations, we depend on the borough for the largest part of our finances. We have also held carnivals for the past three years and find that the carnival idea is fast petering out. The people want something new.

We have decided to make all our citizens contributing members and ask each one for a small donation each year. In this way everyone will do a small part.

W. S. Crane, Chief, Little Falls, N. J.: Funds are raised by drawings for prizes, strawberry and ice cream festivals, dances, shows and carnivals, and motion picture shows at local theatre for which the firemen receive twenty per cent for all tickets sold.

Carnivals give a cash guarantee of four hundred dollars when they move on the lot. We are sure of this amount event if it rains every night. Shows can make money if properly managed and if local talent can be secured.

J. P. Brock, Chief, Carrollton, Ga.: The city finances the department except our special individual portion. Such money is raised through fines levied on those not attending fires and meetings and by donations given in appreciation for the department's good work at a fire. I do not believe that shows and carnivals pay.

Chief of Department, Centerville, Pa.: Our money is raised through carnivals. We have always found carnivals profitable, providing good merchandise is given.

B. P. McFadden, Chief, Galva, Ill.: We raise about three hundred dollars by holding a dance. Returns on the

two per cent insurance tax bring in about $250, so at the end of the year we have a nice balance in the bank. The department has progressed for fifty years without calling on carnivals or shows to help us. I don't believe in that kind of financing.

Report Issued on Ohio Penitentiary Fire

A complete report on the fire that swept through the north wings of cell blocks of the Ohio State Penitentiary at Columbus, Ohio, has been issued by the Ohio Inspection Bureau, Columbus, Ohio. In this fire 320 convicts lost their lives and 133 others received injuries which may eventually cause death or permanent disability.

The following is taken from the report and describes the story of the fire and how the flames were fought:

"A gang of convicts engaged in construction work on the new concrete cell block, I and K, had discontinued operations about 4:00 P.M. for the day, or about an hour and a half before the fire was discovered, and the occupants of G and H cell blocks had been locked in for the night. Just who actually first observed the fire is unknown, but it was presumably seen by several at about the same time. It is thought that a guard in the tower on the outside wall which is a short distance beyond the north end of the building, where the fire originated, was among the first and called to someone on the street below who pulled fire alarm Box 261 at the head of Dublin Ave., as the first call was received by the fire department at 5:39 P.M. from this location.

"The first fire apparatus to arrive was on the ground in not to exceed two minutes after the call was sent in, and was promptly admitted at the wagon stockade gate at the corner of Dennison and West Spring Sts., from where it proceeded into the grounds. The first equipment to arrive consisted of one truck and three engine companies and was under the command of Assistant Chief C. W. Ogborn.

"The first company to go into action connected to the hydrant at the northwest corner of the new auditorium and directed a stream from a turret nozzle into the north window of I and K cell block. However, the heavy iron grilling in the window caused the stream to be so broken up as to be rendered ineffective and this line was eventually cut off. In the meantime, a second pumper had connected to the hydrant directly north of the auditorium and a line was carried through the east door of the cell house directly opposite the passageway between G and H and I and K cells blocks and a stream directed toward the north end of the building. By this time, the fire was burning fiercely and the entire roof over I and K blocks had fallen in. It was also at this point that some of the prisoners from the outside, apparently, driven to desperation by the plight of their fellow convicts locked in the cells of G and H blocks, and whom the guards had failed to release, wrested the hose from the firemen and attempted to carry it into the ranges themselves. However, they were finally persuaded to leave the firemen to proceed uninterrupted with their work. During this time, also, another line had been run from the second pumper, carried to the foot of the cell block, and two small lines attached to a siamese, which were carried the entire length of the fifth and sixth ranges, being turned into the various cells to extinguish the fires in the bedding and cell furnishings. At the same time, firemen and guards aided by convicts armed with axes and sledge hammers, proceeded to knock bars and locks from the cell doors and remove the dead and dying from their cells, carrying them down the stairs or lowering them by means of ropes through holes cut in the outer netting to the floor below, and to the outside.

"Following the first alarm at 5:39, fire department officials, seeing the seriousness of the situation upon their arrival, immediately sent in additional alarms, the second going in at 5:42, the third at 5:48, and a fourth at 6:03, the second and third alarms each calling out three engines and one truck company, and the fourth, four engines and two truck companies, or almost all the available equipment in the city, a total of thirteen pumpers and five truck companies. There were approximately 140 fireman normally responding on the equipment called into service, although this number was considerably supplemented by response of members of the off-shift, so that the total number of firemen working was actually greater than this.

"The third pumper to go into action connected to the hydrant on West Spring Street, directly opposite the penitentiary entrance, the lines being carried over the roof of the front office and up a ladder to the top of the front dormitory, as the fire had spread rapidly through the roof structure above G and H cell blocks, eaten its way over the top of the temporary frame partition between the dormitory and the cell block and was creeping into the concealed roof space over the dormitory. However, the quick and effective action on the part of the department in cutting holes in this roof and directing streams into the concealed space, as well as bringing a hose line in through the barred windows of the south wall on the third range, prevented the fire from spreading into that section. Lines by this time had also been carried up ladders to the roof from the north side of the dormitory. Two additional pumpers connected to the two hydrants directly northeast of the Cotton Mill and another to the hydrant north of the kitchen. There was also a pumper operating in Dennison Avenue through a line over the wall and across the wagon stockade. Still another machine set up at the next hydrant north, but was not brought into action. At the height of the fire there were eight pumpers, mostly of 1000-gallons capacity, in actual operation, supplying twenty-three streams directed on all sides of the burning building, and by about 9:00 o'clock, the fire was brought well under control.

"When the first companies arrived on the scene, the fire was raging fiercely among the wooden concrete forms at the top of incompleted cell blocks I and K, which had not yet been poured and in the debris of the roof which had already fallen in on this section. The intense heat and smoke from this section had also been driven, aided by a fair breeze from the north, under the concrete roof slab above G and H cell blocks, the heat being of sufficient intensity to ignite the bedding, chairs, etc., in the sixth range and to burn and suffocate the inmates, and the heaviest casualties occurred in this range. The heat and smoke that invaded the fifth range, while severe, was less than in the tier above, so that a higher percentage of the men in this range survived. A few, but not many, casualties occurred in the ranges below, principally from suffocation.

Hose Lines Used to Break Up Mutiny

As an aftermath of the recent Ohio Penitentiary fire in Columbus, Ohio, several attempts at mutiny were made by the prisoners. Firemen attempted to quell the uprisings with charged hose lines.

"While the main fire was at its height, outside of the first difficulty experienced by the firemen in having their hose taken away, and while the bodies were being removed, many of the convicts assisted and there was no trouble. However, some later on became unruly, menaced the firemen, and cut the hose from the pumper north of the kitchen. Axes and minor equipment were broken or stolen, rocks were thrown at the apparatus, and one group of convicts attempted to set fire to the large gasoline tank supply wagon of the department by igniting piles of blankets which had been placed under the truck. The driver, although warned by the convicts not to do so, jumped on the truck and removed it from the grounds.

The militia was mobilized promptly and aided by naval reserves and almost the entire police force of Columbus, immediately established a cordon around the outside of the walls. They kept back the public a block around the penitentiary, maintained open lanes for the fire apparatus, doctors, nurses, and rescue forces, and reinforced the guards within the walls.

FIRE DEPARTMENT ACTIVITIES

Reiffton, Pa., Opens Bids—Reiffton, Pa., has opened bids for the purchase of apparatus.

Linwood, N. J., Buys Pumper—Linwood, N. J., has placed an order for a Hahn pumper.

Braddock, Pa., Wants Pumper—Bids have been invited in North Braddock, Pa., for a 1,000-gallon pumper.

Ft. Fairfield, Me., Orders Pumper—Fort Fairfield, Me., has ordered a McCann & Sons 1,000-gallon pumper.

Wilson, N. Y., to Erect Station—Funds are being raised in Wilson, N. Y., for the construction of a fire station.

Cambridge, Mass., Buys Gas Masks—Each of the ladder companies in Cambridge, Mass., will carry gas masks.

Pumper Delivered to Huntington Park—A 1,000-gallon Mack pumper has been delivered to Huntington Park, Cal.

Chief C. H. Fuller Has New Car—Chief Charles H. Fuller of Pawtucket, R. I., has a new car for official use.

Wellsboro, Pa., Collecting Funds—Funds are being collected in Wellsboro, Pa., for the purchase of fire apparatus.

Canandaigua, N. Y., Wants Pumper—A movement has been launched in Canandaigua, N. Y., to purchase a pumper.

White Horse, N. J., to Get Pumper—An Ahrens-Fox pumper is to be delivered to White Horse, N. J., about June 1.

McRae, Ga., Buys Apparatus—McRae, Ga., has placed an order for Boyer fire apparatus. Delivery will be made in May.

N. Tarrytown, N. Y., System Operating—The new fire alarm system of North Tarrytown, N. Y., is now in operation.

Salt Lake City to Buy Rescue Car—Salt Lake City, Utah, is considering the purchase of a truck equipped for rescue work.

York, Me., Buys Pumper—York, Me., has purchased a Seagrave pumper, equipped with an eighty-gallon booster tank.

Murray City, O., to Buy Apparatus—Funds are being raised in Murray City, Ohio, for the purchase of fire apparatus.

Firemen Guests of Community Club—The Mapleton, Ia., Community Club were hosts to members of the Fire Department.

Pumper Urged for Brockton, Mass.—Chief Frank Dickinson of Brockton, Mass., recommends the purchase of a new aerial ladder.

Woonsocket to Have Smoke House—A smoke house is to be erected in Woonsocket, R. I., for training members of the department.

Clementon, N. J., Moves for Paid Force—Steps have been taken in Clementon, N. J., for the establishment of a paid fire department.

Canon City to Buy Apparatus—Canon City, Col., voted to buy a triple combination pumper equipped with a forty-gallon chemical tank.

Enid, Okla., Fire Alarm Improved—The fire alarm system of Enid, Okla., is being improved prior to a survey by Underwriters' engineers.

Casper, Wyo., Considers Fire Prevention—A fire prevention committee has been named in Casper, Wyo., by the Chamber of Commerce.

Dedham, Mass., Increases Pay of Firemen—The pay of members of the Fire Department of Dedham, Mass., has been increased $100 a year.

Brockton, Mass., Chief to Have New Car—A five-passenger closed car has been purchased for the use of Chief F. F. Dickinson of Brockton, Mass.

Reading, Pa., Awaits New Ambulance—Reading, Pa., is expecting the delivery of its new fire department ambulance equipped with a coffee urn.

Lewistown, Pa., Has New Alarm—A new system of telephone hook-up between the various fire stations has been established in Lewistown, Pa.

Mansfield May Have New Fire Station—The selectmen of Mansfield, Mass., are considering the construction of a new fire station to cost $45,000.

Bangor, Me., to Have New Pumper—Bangor, Me., has placed an order for a 1,000-gallon pumper with D. McCann Sons Company, Portland, Me.

West Lawn, Pa., to Erect Station—Firemen of West Lawn, Pa., voted for the construction of a fire station and community building to cost $45,000.

Tiffin, Ohio, to Buy Pumper—Bonds will be sold to finance the purchase of a 1,000-gallon pumper for Tiffin, Ohio. A new car will be ordered for the chief.

Needham, Mass., to Erect Station—A bill has been signed authorizing the loan of $100,000 for the construction of a police and fire station in Needham, Mass.

W. Hartford to Have Attractive House—A very attractive fire house is to be erected in West Hartford, Conn., at a cost of $50,000. Contracts have been awarded.

Charles City, Ia., Chief Resigns—Chief William Kintop, of Charles City, Ia., has handed in his resignation, effective immediately. He was appointed one year ago.

Rochester, N. Y., Firemen Re-Elect Officers—All the officers of the City Firemen's Association of Rochester, N. Y., have been re-elected. Joseph Lara is secretary.

Chief Resigns Over Apparatus Selection—So intense was the feeling that developed with the selection of new fire apparatus in Kirkland, Wash., that Chief Williams resigned.

Portland Fireboat to be Deeper—The new fireboat being constructed for Portland, Me., will have a six-foot draft instead of five. This was done to make the ship more stable.

New House Opened in Hazleton, Pa.—A new fire station was opened in Hazleton, Pa., for the Pioneer company. At the same time the company celebrated its sixty-first anniversary.

Pawtucket Firemen Want Two-Platoon System—Firemen of Pawtucket, R. I., are to petition the Supreme Court to compel the city to install a two-platoon system for which approval was voted in 1924.

Springfield, Mass., Has New Squad Wagons—Two new squad wagons have been placed in service in Springfield, Mass., by Chief Arthur Montmeny. Each truck has a booster pump and a seventy-gallon booster tank.

Work Started on Davenport Tower—Construction has started on the fire drill tower at the central fire station in Davenport, Ia. One man from each company will be sent to a drill class twice each week.

Davenport Firemen Ask for Discarded Toys—Davenport, Ia., firemen have asked that housewives engaged in spring cleaning, put aside discarded toys so that the poor children may be benefited at Christmas time.

State Approves Training School—Plans for a short course for firemen to be held at the A. & M. College, College Station, Tex., May 5 and 6 has been approved by the Texas Insurance Department. The school is open to all firemen of the state and no charge is made.

Daughter Responds for Father—Miss Eleanor Davis, whose father is Chief in Moultonboro, N. H., drove the fire apparatus six miles to a fire when her father who drives the machine was ill and unable to respond.

Pocomoke City Orders Pumper—A 1,000-gallon pumper has been ordered by Pocomoke City, Md. With the new purchase the city will have two 1,000-gallon pumpers, two chemical engines and a 500-gallon pumper.

Auto Licenses Revoked in Westboro—George A. Parker, Massachusetts State Registrar of Motor Vehicles has suspended the licenses of two drivers who interfered with fire apparatus responding to an alarm in Westboro.

Plans Approved for Youngstown Houses—Plans were approved for new fire stations for Youngstown, Ohio, as embodied in a survey recently completed. The central fire station is to be replaced and two new houses erected.

Village May Purchase Fire Department—North College Hill, Ohio, is negotiating for the purchase of the village fire department. It is expected that an agreement will be reached so that the village will own the equipment and pay for its upkeep, while the department which is separately incorporated, will retain for itself control of personnel and management.

PROPOSED IMPROVEMENTS

Sturgis, S. Dak.—A fire department was recently organized here. 500 gal. pumper to be purchased at once, according to reports.

Spokane, Wash.—Plans for new fire station at Eighth and Monroe Streets have been completed. Estimated cost $13,000.

Beverly Hills, Calif.—Reports state fire department headquarters to be erected.

Newman, Calif.—Chamber of Commerce planning formation of a rural fire department. To organize a legal district including all the western part of Stanislaus county.

West Allis, Wis.—Fire Chief Burbach recommended the purchase of two pumpers for the department. Estimated cost $14,500.

La Cruces, N. Mex.—Board of Trustees have decided to purchase new fire equipment at once. (Previous reference April 23.)

Watkins Glen, N. Y.—Fire department urging the installation of a new code fire alarm system, according to reports.

Logansport, Ind.—Plans were adopted by Council for new fire station to be erected in east end of city.

Owensmouth, Calif.—A new request for establishment of a fire station was filed with City Council, according to reports.

Tenders for Fire Apparatus

TORONTO, ONT,. CANADA

Bids received up to noon, May 20, 1930

Tenders addressed to the undersigned will be received by registered post only, up to noon on May 20th, 1930, for the supplying of the following:

1 75-foot Aerial Ladder Truck

3 Combination Hose and Chemical Trucks

Specifications of the above can be seen and forms of tender obtained upon application at the office of the Fire Department, 152 Adelaide Street West, Toronto. The usual conditions relative to tendering as prescribed by Specifications, Tender Form and City By-Law must be strictly complied with, or the tender will not be entertained. The lowest or any tender not necessarily accepted.

Bert S. Wemp, Mayor
Chairman, Board of Control,
Corporation, City of Toronto,
Ont., Canada

Wanted Fire Apparatus Salesman

Fire apparatus salesman wanted to cover Eastern New York State selling Prospect Fire Engines and several lines of Fire Equipment. Address Box 255, FIRE ENGINEERING, 24 West 40th St., New York City.
4-16

For Sale

1-8 Circuit combination Fire and Police signal Switchboard.
1-4 Circuit Telephone and Police Signal desk.
1-8 Circuit Battery Rack
Approximately 45 Gamewell Fire Alarm boxes. 15 Police Signal Boxes.
200 Battery Jars and Covers
All the above equipment just cut out of service and can be purchased at a mere trifle of its original cost. Write or telegraph.

Hobart Bradstreet,
Dir. of Public Safety,
Steubenville, Ohio
4-30

Program of New Mexico Fire School

(*Continued from page* 412)

Thursday, June 5.

9 a.m.—Elementary Hydraulics and Fire Pumps. Prof. A. Diefendorf, University of N. M., Albuquerque, N. M. Questions and discussion.

10 a.m.—The Chemistry of Fires. Prof. Veon C. Keich, University of N. M., Albuquerque, N. M. Questions and discussion.

11 a.m.—Chemical Fire Extinguishers. C. B. White, Chief Chemist, American LaFrance & Foamite Industries, Inc., Elmira, N. Y. Questions and discussion.

12 m.—Luncheon.

2 p.m.—Ladder and Drill Tower Evolutions, Group 2, Chief Harry K. Rogers, Western Actuarial Bureau, Chicago, Ill.

2 p.m.—Practical Pumper Operations, Group 1, Fred Warner, Master Mechanic, Denver Fire Dept., Denver, Colo.

9 p.m.—Goodfellowship Dance. Sponsored by Julius Pearse, District Manager, American LaFrance & Foamite Industries, Inc.

Friday, June 6.

9 a.m.—Fire Prevention by Fire Departments. L. A. Barley, Chief Engineer, Mountain States Inspection Bureau, Denver, Col. Questions and discussion.

10 a.m.—Modern Fire Fighting Methods. Chief J. B. Brown, Las Vegas, N. M. Questions and discussion.

10:30 a.m.—First Aid Treatment and Salvage Operations. Chief Harry K. Rogers, Western Actuarial Bureau, Chicago, Ill. Questions and discussion.

12 m.—Luncheon.

2 p.m.—Question Box and Discussion.

3 p.m.—Awarding of Diplomas, Dean R. S. Rockwood, Director of Course.

3:30 p.m.—Report of Standing Committees.

3:45 p.m.—Report of Special Committees.

4 p.m.—Unfinished Business.

4:30 p.m.—Nomination and Election of Officers.

5 p.m.—Selection of next meeting place.

5:15 p.m.—New Business.

5:30 p.m.—Appointment of Standing Committees.

7:30 p.m.—Trip across the International Border to Las Palomas, Mexico, as guests of the Deming Fire Department.

Eastern Fire Chiefs Issue Program

The third annual convention of the Eastern Association of Fire Chiefs will take place at the Lord Baltimore Hotel, Baltimore, Md., on June 10 and 11. The program is as follows:

Tuesday, June 10. 10 a. m.

Called to order by President C. W. Greenfield.
Prayer by Right Rev. Monsigneur Peter J. Ireton, Pastor St. Ann's Church.
Salute to the Flag.
Singing—"Star Spangled Banner."
Reading call for Convention. Roll Call. Reading minutes of preceding Convention.
Address of Welcome, Hon. Wm. F. Broening, Mayor, City of Baltimore, Baltimore, Mr.
Reply by Chief Richard L. Smith, Pittsburgh Fire Dept.
Address by President C. W. Greenfield.
Appointment of Resolution Committee. Report of Secretary. Report of Treasurer. 12.30 P. M. adjournment for Luncheon until 2 P. M.

Tuesday, June 10, 2 P. M.

Called to order by President C. W. Greenfield.
Topic for Discussion—"Salvage Work." Chief Edward H. Warr, Fire Insurance Salvage Corps, Baltimore, Md. Discussion.
"Methods, Tactics and Strategy of Fire Fighting." Deputy Chief John J. T. Waldron, New York City Fire Dept. Discussion.
"The Scope of the Fire College." Walter R. Hough, Ex. Fire Commissioner, Baltimore, Md. Discussion.
Round Table (Chief August Emrich, presiding).

Wednesday, June 11, 10 A. M.

Called to order by President C. W. Greenfield.
Opening Prayer, Rev. Oscar Blackwelder, Pastor, Christ Luthern Church.
Adoption of Revised Constitution and By-Laws.
"Unusual Happenings at Time of Fire", Chief Ross B. Davis, Philadelphia.
Report of Resolutions Committee.
"Proper Care of Hose and Equipment." Battalion Chief William Simmler, Philadelphia.
New Business.
The American Creed.
Note.—Our host, Chief August Emrich has arranged for several interesting events, to all of which we are invited, these will be announced from the platform during our Convention. The Maryland State Volunteer Firemen's Association will hold their Thirty-eighth Annual Convention at the Lord Baltimore Hotel immediately following our Convention; all members of the Eastern Association of Fire Chiefs are invited to attend and participate in the entertainment.

Wednesday, June 11, 1 P. M.

Inspection of High Pressure System—Boat Trip—Inspection of Baltimore and Ohio Grain Elevator—Practical Demonstration with miniature Elevator showing dust explosion—Department of Agriculture, Bureau of Mines, U. S. Government—First time ever shown.
Demonstration of Fireboats—Luncheon will be served during this trip.
Inspection of Western Maryland, McComas Street pier.

Fire Prevention Plaque Presented to Philadelphia

A group of proud residents of Philadelphia, Pa., visited Washington, D. C., to witness the presentation of the award for fire prevention work to Philadelphia. The awards are made each year by the National Fire Waste Council of the United States Chamber of Commerce. In the front row from left to right are Captain Clinton, Fire Marshal of Philadelphia; Chief Ross Davis, and P. H. Gadsden, President of the Philadelphia Chamber of Commerce.

FALSE ALARMS

PASSED THE CENSOR

The shifts had changed and it was his night off. So just as soon as he removed his uniform and put on his street clothes, he went calling. She was expecting him. After the usual preliminaries, he started to tell stories.

She became indignant.

"I thought you said that was a parlor joke."

He blushed and replied, "Well, I heard it in a billiard parlor."

In the game, its grit. In spinach, its terrible.

THAT'S THAT

Ever since the Johnson fire, he had not been feeling normal. The chief ordered him to see the department physician before he came back on full time.

The doctor diagnosed the complaint as digestive trouble aggravated by too much smoke.

"But what shall I tell my wife?" the patient asked.

After a few moments thought the doctor suggested, "Tell her you are suffering from syncopation."

The patient did as he was told.

"What is syncopation?" asked the wife.

"I don't know, but that's what the doctor said."

And so at the first spare moment she consulted the dictionary and learned it meant, "Irregular movement from bar to bar."

Coming events cast their straw votes before them.

TRUTHFUL SIGNS

The shifts had changed, and two members of the off-shift decided to go shopping. They stopped to look at a window where a sale was in progress.

"There's a good pair of shoes. I think I'll get them."

The other looked at the price and the sign "Last Seven Days" displayed above them.

"Come on, you don't want those shoes. Let's move on."

"Why not?"

"Sure, you want your shoes to last longer than a week."

Someone is going to cross the grapefruit with a watermelon one of these days and then there'll be some real action.

ODDS TOO GREAT

He had tried to sneak back into his hotel room where he and his roommate were attending the county convention. The stroll down the street by himself had upset his sense of equilibrium. He was seen coming into the room.

His friend took a firm hold of him, sniffed, and then said in an angry tone: "I'll bet you've been drinking again."

"I wouldn' bet with my own father," was the reply.

SOUND EFFECTS

A large crowd attended the formal opening of the fire station, and why not! Music was provided, there was plenty of refreshments prepared by the men, and everything was free.

One of the firemen was in a corner holding hands with a most attractive girl. Suddenly, there was a crash.

"Come on, let's dance," she said.

"That wasn't the orchestra," he replied. "That's only Mike. He just dropped a tray of dishes.

And among the groups the census takers should not overlook are the residents of drug store telephone booths.

NO APPEAL

There was considerable excitement on the street at the state university on which most of the fraternities are located. It was early in the morning.

"Wake up Bill, there's a fire on the Row."

"Fraternity house or sorority?"

"Fraternity."

"Well then let the damn thing burn."

And some other good old days to remember are the ones when a prisoner was safe in prison.

NOT SOON ENOUGH

The Chief's chauffeur had decided to leave the thrilling life made possible by fire department service.

At the first opportunity he asked the department clerk whether the chief was angry when he had heard of his intentions.

"Oh, yes," said the clerk. "At first he thought it was this week. He got very much excited when he found out it was next week."

People who are too busy to take a vacation should learn from the lowly ant. Consider the ant. There is nothing busier than an ant, and yet it always finds time to go on picnics.

ALWAYS IN VIEW

In appreciation of his services in arranging a successful state convention, the association presented the local chief with a most unusual clock. This was mounted in the fire house.

A visitor observed the clock and asked:

"Have you got that clock insured? Aren't you afraid of losing it?"

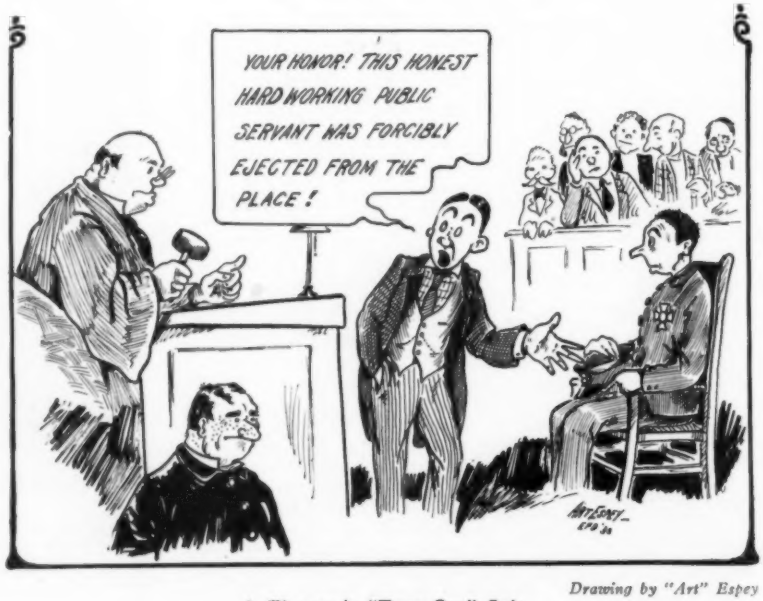
"No, that clock is absolutely safe where it is. There are too many persons watching it all day long.

HONORED

The boys had been teasing Harry about his first signs of gray hair. He was very sensitive for he had tried the promotion examinations several times and had failed, and he did not want to be classed with the old firemen of the force.

He went to the drug store nearby and asked, "Have you anything for gray hair?"

The kind old druggist replied, "Nothing but the greatest respect, sir."



Drawing by "Art" Espey

A Firemen's "Turn-Out" Suit

"Mathews" Hydrants Are Easier to Keep in Service

More motor accidents are breaking more fire hydrants. This condition is directing more attention to "Mathews" *hydrants* because *they* can be replaced and put back in service so much more *easily* and *quickly* than ordinary hydrants—*without digging or breaking the pavement.*

"Mathews" hydrants have been the leader for 64 years. They cannot leak when broken, are easily adjustable for number, direction and elevation of nozzles, and operating threads are protected from sand and grit. Specify "Mathews" hydrants. Write for complete description.

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ENGINEERS - - IRON FOUNDERS - - MACHINISTS
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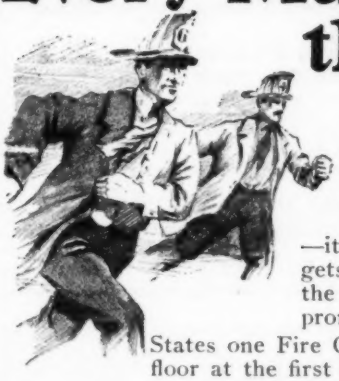

The peculiar, carrying Fedelcode tone pierces through all obstacles. It is heard—it is understood—it gets every man out on the jump to fight fires promptly.

States one Fire Chief, "Feet on the floor at the first blast, is the action we get when our Fedelcode Siren roars."

An adequate Fire Alarm Signal must come first in plans for low cost Fire Protection.

Send for full details. No obligation.

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FEDELCODE SIRENS

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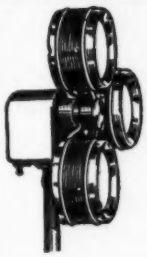


BUCKEYE "ROTO-RAYS"—A silent signal of unquestioned effectiveness to protect your apparatus and your firemen against accidents.

At night these three revolving red signal lights make identification of the apparatus instantly possible as far as light is visible.

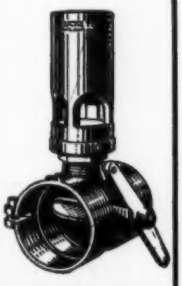
Insist upon having "Roto-Rays" on the next piece of apparatus you buy. It's just as essential as the whistle, the siren or the bell. Easily installed on apparatus now in service.

The Powerful BUCKEYE EXHAUST WHISTLE predominates in over 600 fire departments where serious traffic problems exist.

The shrill blast of a Buckeye Whistle effectively carries far ahead of the apparatus. Its sound is distinctive and extremely penetrating.

"Roto-Rays" and a Buckeye Whistle form the most effective combination of Warning Signals in existence.

Prices and full particulars upon request.



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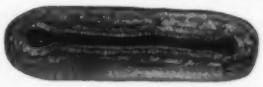
"IT'S DIFFERENT"

Fire hose of every description, make or kind has to be stored flattened ninety-nine percent of the time.
The flattening of Bi-Lateral Hose curves the rubber in the space that is free from the jacket.
Hose manufactured the old way compresses and creases the rubber when it is flattened.

"THAT'S THE DIFFERENCE"



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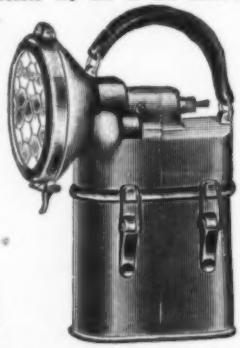
The EXCELLIGHT is always ready, safe, powerful, economical and simple. It is moisture and waterproof, which eliminates short circuits and greatly increases the life of the batteries.

The EXCELLIGHT is indispensable, especially around places where inflammable materials are stored or manufactured.



With ordinary use the batteries will last for many months and can be replaced at small cost. Batteries are standard.

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Used and endorsed by Fire Departments, Railroads and Police Departments. Always dependable.

Write for sample, full information and special net prices to fire departments.

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The design of Hale pumps has been perfected through fifteen years of active experience, and has resulted in a rugged, highly efficient product.

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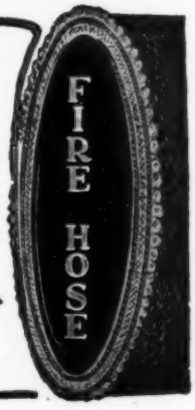


FIRE CHIEFS OF AUSTRALIA HOLD FIVE-DAY CONFERENCE

Consider Formation of a Branch of the Institute of Fire Engineers of England—Discuss Problem of Nitro-Cellulose Film

THIRTY delegates were present at the sixth Interstate Fire Brigade Conference held in Sydney, Australia, October 28-November 1. Hon. T. J. Smith, President of the Board of Fire Commissioners of New South Wales was elected president of the Conference. In his introductory remarks he said:

"We have taller buildings, with fire resisting construction, nevertheless, whose contents are still inflammable; newer industrial hazards and the universal use of motion picture film, with its problems, and so on. Further the use of highly inflammable oils, and the problem of electricity.

"I have thus referred to fire extinction and fire prevention, and it does seem to me that the time is not far distant when a Chair of Fire Engineering at the University should come into being.

"Education does not make a man any the less fit for fire fighting, rather, it is a valuable adjunct to those who hope to carry executive positions in the higher ranks of the Service. I know that in America and England schools are established, but from what I can gather, something somewhat different to either country is required in Australia. I feel that it can be done, and if a diploma or degree can be awarded, I feel confident that that, too, would all make towards the highest efficiency of the Service."

Papers were read by the Hon. Samuel Mauger on "Our Quest—the Ideal Fire Brigade," and by J. R. Campbell on "Fire Brigades in Monetary Relation to the Commonwealth Government."

On the second day, W. M. Chellew read a paper on "The Enemy That Never Sleeps." "Fire Prevention," was presented by G. E. Strode. J. M. Lamborne read a paper on "Fire Brigade Demonstrations in Western Australia." T. P. H. Nance spoke on "The Fire Protection of New South Wales." R. W. Smith had a paper on "Fires in Broken Hill Mines—How They Are Dealt With." The last paper was by W. Whyte on "Electricity as it Relates to the Fire Service."

The afternoon was spent in an inspection of the Vacuum Oil Company's depot at Pulpit Point, and the Shell Company's depot at Gore Bay.

No business meetings were held on the third day of the conference. Instead, the delegates assembled early in the morning for an inspection of the fire stations in the city, suburban and near country fire districts.

On the fourth day, under discussions, there were many comments on the paper by Hon. Samuel Mauger, "Our Quest—the Ideal Fire Brigade." The other papers were also commented on, and in addition the delegates presented accounts of personal experiences in the field of fire prevention and fire fighting.

Major H. R. Carter of Queensland said:

"I would like to congratulate Mr. Strode on his paper (Fire Prevention). One very valuable suggestion he made, and that is that fire prevention should be taught in our schools as a safety first principle. We, in Brisbane, have been going into the matter of malicious false alarms, and believing it was due in a large measure to irresponsible children, we asked the Under Secretary of Education if he would, through the School Paper, the official organ of the schools, bring before the children the offense of turning the brigade out uselessly. That request was acceded to and with very excellent results."

It was voted to hold the 1930 conference in Victoria and the 1931 conference in Western Australia.

The conference adjourned so that the delegates could witness a demonstration of the appliances of the New South Wales Fire Brigade.

On Friday, a motion was presented by J. T. Wilkins of Victoria, "That the Conference consider the advisability of establishing in Australia a branch of the Institute of Fire Engineers, England."

Many present spoke on the motion. The President said: "Everyone knows the need of such an institution as this in Australia, in order to make the men more efficient for their job. I have had the pleasure of reading the minutes of the Conference held in Manchester, at which our very good friend, Mr. Wilkins, was present. May I pay him the compliment of saying that I actually read his speech word for word."

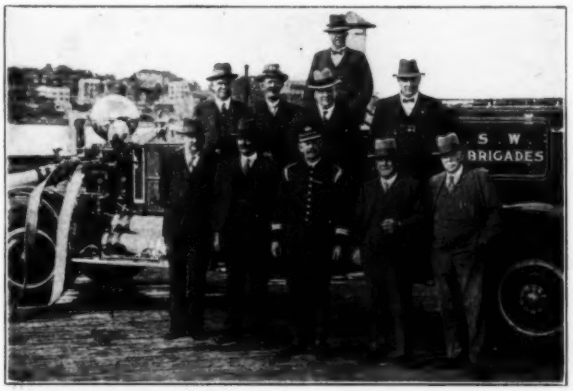
The motion presented by Mr. Wilkins was unanimously carried.

One of the delegates asked, "Are brass helmets a danger in view of the universal use of electricity, and are leather helmets advocated?" To this Mr. Wilkins replied:

"In many of the brigades that I visited, the brass helmets were hanging on the hooks, not used except for ceremonial occasions. For actual fire use, leather helmets are mostly used. Very few of the brigades in America use brass helmets. They are not considered suitable. In London they are still clinging to the brass helmet. If you wanted to make any alteration there, it would take a very long time to do it. In Edinburgh and Glasgow, I found that they were discarding brass helmets for actual fire work. I might say that I brought a couple of leather helmets back with me and am of the opinion that they are more suitable, but I do not recommend them so far as the appearance of the brigade is concerned, but from a utility point of view. The leather helmet is of much more service to the wearer at fires."

The following motion was introduced and was approved:

"That this Interstate Fire Brigade Conference affirms the desirability of the standardization of fire preventive and fire resisting measures in the construction of buildings, and that the Standards Association of Australia be informed of the resolution."



Fire Brigade Chief Officers

Front row, left to right, J. M. Lamborne, chief officer, W. A. Fire Brigades; W. Younger, chief officer, Metrpolitan Fire Brigades, Brisbane, Queensland; T. P. H. Nance, O. B. E., chief officer, Fire Brigades, N. S. W.; J. E. Dickie, chief officer, South Aust. Fire Brigades; W. M. Chellew, chief officer, Country Fire Brigades, Victoria. Second row, J. T. Wilkins, J. P., chief officer, Metropolitan Fire Brigades, Melbourne, Victoria; W. Whyte, supt., Fire Brigade, Rockhampton, Queensland; H. B. Lee, consultant, Commonwealth Fire Board; W. J. Smith, chief officer, Fire Brigade, Gympie, Queensland. At back, G. Garven, chief officer, Fire Brigade, Townsville, Queensland.

H. M. Webb of New South Wales brought up the subject of nitro-cellulose film in relation to the fire hazard. In commenting on the matter he said:

"I would like to refer to the ordinance passed in New York which prohibits nitro-cellulose film. The ordinance reads, 'After September 1, 1929, it shall be unlawful for the person or authority in charge of maintaining, operating or conducting any hospital, clinic, dispensary, school, college, home, asylum, or institution to bring into, expose or develop, or allow to be brought into, exposed or developed in such institution, any nitro-cellulose film or material that may be in or upon the premises of any such institution and already exposed and developed at the time this ordinance becomes effective shall be stored in such place and manner as the Fire Commissioners shall prescribe and not otherwise, but none shall be allowed to remain after September 1, 1932.'

In his talk he gave a description of the Cleveland Clinic disaster in which so many patients and doctors lost their lives.

Mr. Webb was presented with a gift from the delegates for his work in furthering the aims of the Conference. In accepting the gift, Mr. Webb said, "The Conference of 1906 held here, I shall never forget. The chief officer and the secretary of that time have both passed away and I can only trust that my boys, when I shall be no longer here, will remember this Conference as I do the last, when they gaze on this, your gift."

Following the formal adjournment of the meeting, the delegates made an inspection tour of the water front.

New York Bureau of Fire Prevention

(*Continued from page* 400)

after January 1, 1925. Similar resolutions were passed by the Pacific Coast Association of the Fire Chiefs, the Dominion Association of Fire Chiefs and the Fire Marshals Association of North America.

Hazards of the "Talkies"

The creation of sound in connection with the production of moving pictures, requiring studios furnished with drapes and materials in order to absorb reverberations and echos has increased the hazard to life therein. The existing ordinances being inadequate, the Fire Commissioner designated a committee to study this subject and report what protection is necessary. The fundamentals thus far established are a fireproof structure, sprinkler protection, fire alarm, fire drill, fire brigade and telegraphic communication with Fire Department headquarters. All stage properties and scenery are required to be flame proofed or fire retarded.

In connection with this subject it may be of interest to recall the fire in the Metropolitan Opera House in 1922 which destroyed the stage and part of the auditorium. A mass of inflammable stage scenery fed the fire which traveled up the shafts to the dressing rooms and through improperly protected wall openings to the upper auditorium. Stage skylights did not open automatically through heat, the asbestos curtain could not be lowered and an insufficient supply of water defeated the purpose of the sprinkler to quench the fire.

Automatic Sprinklers and Standpipes

Automatic sprinklers are devices for distributing water by means of valves or heads which are arranged to open automatically under the action of heat or from the fire which they are intended to extinguish. Water is distributed in the form of a rain of jets or drops to drench anything inflammable beyond the point of ignition. The fire must be discovered by this device at its point of origin to prove effective as the water supply is limited. The pressure tank contains a supply of water for 12½% of the heads for 20 minutes and the gravity tank supplies 25% of the heads for the same period.

Prisoners Used in Fighting Forest Fires

Prisoners from the reformatory of the District of Columbia aided U. S. Army men in fighting the forest fire in the Virginia woodlands. The fire brought out large numbers of army fire-fighters. The photograph was taken in the vicinity of Mt. Vernon.

Standpipes are required in all buildings over 85 feet in height. They bring the hydrants located on the sidewalk curb up to every floor in the building available for fire fighting purposes. The standpipe on the Chrysler Building, the tallest in the city, has just been tested in accordance with the rules of the Board of Standards and Appeals. There are three 8″ risers up to the twenty-second floor: 2 up to the forty-third floor and one riser continues up to the seventy-third floor where there is a tank with a 3,500 gallon supply of water. On the twenty-seventh and forty-ninth floors there is a 5,000 gallon standpipe reserve supply on each, and a 10,000 gallon tank in the cellar. There is a pump in the cellar, one on the twenty-fifth floor and another one on the forty-eighth floor. Water in the cellar is picked up by these intermediate pumps to the topmost outlets giving a minimum flowing pressure of 50 lbs. per square inch of water. Valves are on the lines enabling damaged portions to be cut out and temporary by passing made by means of hose, if such be necessary.

Regulation of Spray Painting

Spray painting is taking the place of brush work. Some lacquers and coating fluids have a nitro-cellulose base and together with a spark or an open flame will readily produce an explosion and fire.

Rules to regulate this process will soon be in the making. In addition to fireproofed enclosures spray booths should have an adequate exhaust system and a plentiful renewable supply of air to ventilate. Open flames and apparatus that might spark should not be used, and proper provision made for the storage of paints and lacquers. Fire extinguishers suitable for oil fires or an adequate sprinkler system should be installed for fire protection.

Hazards from Ships' Cargoes

On February 11, 1930, the steamer Muenchen, of the North German Lloyd Line, sent in an alarm of fire soon after she reached her dock. Part of her cargo was peat moss compressed in bales and nitrate of potash (saltpetre). The fire turned the water which was played on the cargo into steam. This must have blanketed the evoluting gases of combustion and caused the explosions reported. One explosion blew a man off the tower of the fireboat and submerged that vessel. The cause of this accident was ascribed to thermo genesis of spontaneous combustion. Steps have been taken by the National Fire Protection Association and others to study this phenomena so as to place the control of fires from this cause on the same basis as the control of other fires. The accident to the Muenchen blew out a portion of her bottom 10 feet by 15 feet and a 700 lb. roll of newspaper was blown half the length of the ship through the shaft alley.

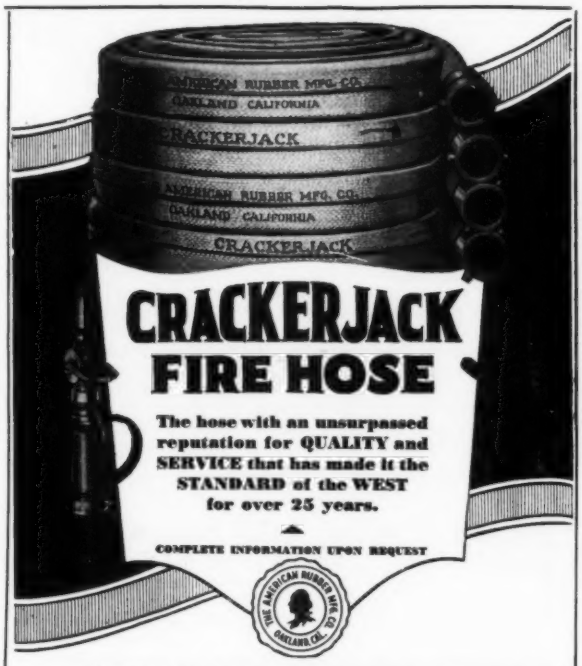
There are laws governing the steamboat inspection service and ocean and coastwise vessels in this country, but to protect the travelling public on ships from foreign ports prompt action should be taken by international agreement to regulate the storage of freight for the safety of passengers, officers and crews.

(From a paper read before the New York Section, American Institute of Electrical Engineers.)

Linwood, N. J., Buys Pumper—Linwood, N. J., has placed an order for a Hahn pumper.

Brockton, Mass., to Buy Apparatus—Brockton, Mass., plans to purchase an aerial ladder truck and a triple combination pumper.

San Mateo, Cal., Plans Fire Alarm—A new fire alarm system has been planned for the downtown section of San Mateo, Cal.



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Specializing in badges and insignia equipment for every fire department need, the EVERSON-ROSS line, known for its fine quality of materials and workmanship, offers a large, up-to-date selection to suit the most discriminating taste. Before you buy—

Write for our Fire Department Badge Catalog No. 32.

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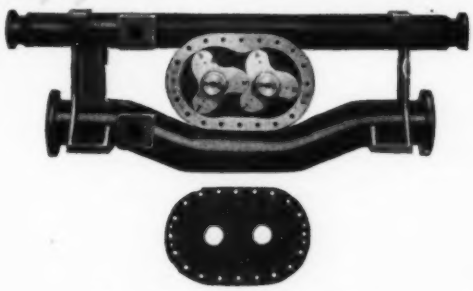

For Your Protection

THE WATEROUS ROTARY PUMP

If one thing, more than any other, is responsible for the outstanding performance of the Waterous Rotary Pump, it is the *new Waterous rotor*. This was not a chance development, but the reward of a constant search for improvements. It helps to make Waterous what it is—*the dependable fire pump.*

Waterous Dependable

WATEROUS COMPANY
FIRE HYDRANTS—ROTARY PUMPS
WATER WORKS SUPPLIES—FIRE APPARATUS
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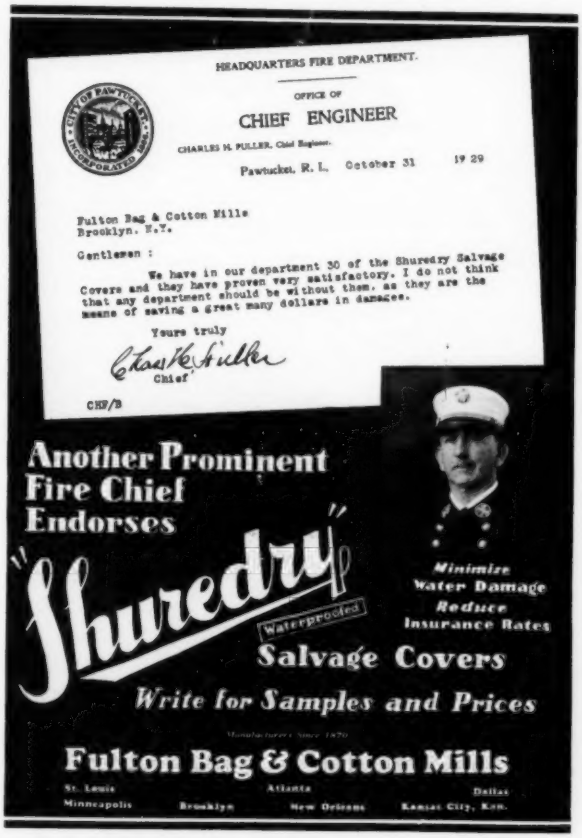
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OFFICE OF
CHIEF ENGINEER
CHARLES H. FULLER, Chief Engineer.
Pawtucket, R. I. October 31 19 29
Fulton Bag & Cotton Mills
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Gentlemen :
We have in our department 30 of the Shuredry Salvage Covers and they have proven very satisfactory. I do not think that any department should be without them, as they are the means of saving a great many dollars in damages.
Yours truly
Chief
CHF/B
Another Prominent Fire Chief Endorses
"Shuredry"
Waterproofed
Salvage Covers
Minimize Water Damage
Reduce Insurance Rates
Write for Samples and Prices
Fulton Bag & Cotton Mills
St. Louis Minneapolis Atlanta Brooklyn New Orleans Dallas Kansas City, Kan.

Bennington Invites Fire Chiefs

Many of the chiefs bound for the Eighth Annual Convention of the New England Association of Fire Chiefs in Rutland, Vt., on June 24-27 are planning to stop over night at Bennington on the way to Rutland. An invitation has been extended to the New England chiefs by the Chamber of Commerce, Fire Department and Fire Commissioners of Bennington stop over and enjoy the historic scenery and the royal welcome planned by the committee. Bennington is forty-six miles south of Rutland so that it will be an easy ride in the morning from Bennington.

In connection with the convention a campaign is being conducted for an increase in membership and the following letter has been sent out by the state vice-presidents in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut:

To The Fire Service of New England:

DEAR SIR: The New England Fire Chiefs hold their eighth Convention this year in the beautiful city of Rutland, Vermont, June 24-25-26-27.

The success of these Conventions is known throughout the country for their fine exhibits of fire apparatus, equipment, and subjects discussed at its sessions.

We are making an appeal this year for an increase in membership, as matter of great importance both to our association and the International Association will be discussed.

Our slogan is, "EVERY MEMBER GET A MEMBER." If you are not a member why not fill out the enclosed application and mail it to the Secretary. If you are a member why not try to interest someone else, as you know what we are doing.

When you become a member of this association you also are included in membership in the International Association; $3.00 paid with the application and you have no more to pay until June, 1931.

The report you receive from both associations costs more to print than you pay in dues; every word spoken in both Conventions; all papers presented and the advertising directory is free to you, if you are a member.

We need the benefit of your experience; no town is too small to be represented; no city too large; both are welcome and the larger our organization the greater our accomplishments.

Our object, to better the service and reduce the loss of life and property, should appeal to everyone interested in the fire service.

Why not send in your application now?

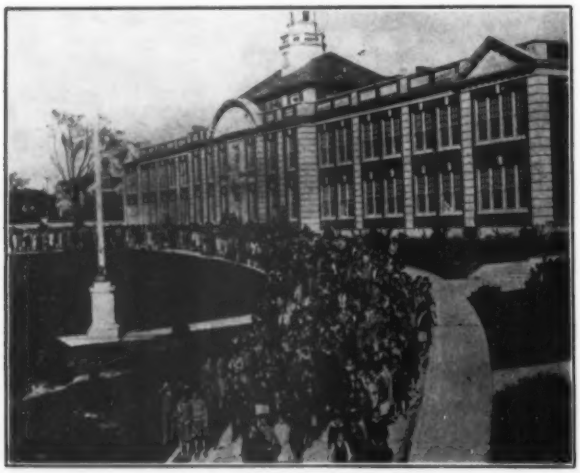
Very truly yours,
Your State Vice President.

Chief Veit Active With Fire Drills

Prior to the elevation of Chief Victor H. Veit as head of the fire department at Stamford, Connecticut, that city held but few fire drills among its school children, an occasional visit to the schools being the limit.

Today Chief Veit is conceded to be one of the most active fire department heads in New England. He inaugurated a system some time ago through which all schools at Stamford are now thoroughly acquainted with drill work.

The accompanying illustration shows the students attending the Stamford High School during a recent fire drill which was "pulled" unknown to the two thousand pupils.



Fire Drill at Stamford, Conn., High School

The building was completely emptied in two minutes and forty-five seconds.

"During the early spring and late fall of every year I visit all public and private schools and conduct a drill," said Chief Veit. "No advance 'tip' of any kind is given to the teachers or pupils. The result of these drills have proven very satisfactory, the time required for emptying the different schools varies from thirty-five seconds to two minutes and forty-five seconds. It's all according to the size of the school.

"There has never been any disorder among the pupils as I believe they realize the imporatnce of my work and are always willing to work with me and my assistants. The children about the ages of five and six go through the drill in real earnest.

"I feel it is part of the duty of every fire department chief to see that every precaution is taken for the safety of our school children in case of fire. In addition to the system of fire drills we also demonstrate to the pupils by means of a regular fire alarm box mounted on a pedestal, how to send in a fire alarm and also instruct them to become acquainted with the location of the nearest fire alarm box to their homes."

The city of Stamford has twenty-two schools with 10,760 pupils enrolled.

THOMAS F. MAGNER.

Russell A. Glenn With Gamewell Co.

Russell A. Glenn, formerly with the Bridgeport Auxiliary Fire Alarm Company of Bridgeport, Conn., has joined the sales organization of the Gamewell Company.

He has been with the Bridgeport Auxiliary Fire Alarm Company since 1916. During the war Mr. Glenn was doing fire prevention work for the United States Government among the plants making munitions for the army and naval forces.

Mr. Glenn has already taken up his duties as sales engineer with the Gamewell Company, and will cover the Connecticut territory. He will be operating out of 335 Fairview Ave., Bridgeport, Conn.

Russell A. Glenn

144 Trapped by Swinging Doors

During a religious celebration in the town of Gaesti, Hungary, a candle set fire to paper decorations and brought death to 144 persons.

The great loss of life was due to the doors opening inward and consequently jamming tight when the panic-stricken worshippers crowded against them trying to escape.

The village had neither firemen nor fire-fighting equipment. Most of the able-bodied men and women who had not attended the church services had gone on trips to surrounding villages. Thus when the fire started, there were few on hand to attempt to force an opening from the outside.

One Dead When Plane Flares Up

One person was burned to death and eight others were injured when a fuel tank in a Fokker plane being serviced at the Fokker Company's main plant at the Teterboro Airport, exploded. The victims were rushed to the hospital at Hackensack, N. J.

Although it was reported that the men were soldering the cowling of the plane when the flare-up occurred, this was denied later. Because of an ironclad rule at the airport that all gasoline tanks must be emptied before the planes are taken indoors, it is not likely that there was gasoline in the fuel tank.

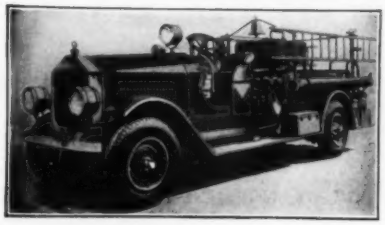
The flash came quickly and the men who were injured were burned black from head to foot. An investigation failed to disclose the cause of the fire.

Wheeling, W. Va., to Erect Station—Wheeling, W. Va., is seeking a site on which to erect a central fire station.

Auto Licenses Revoked in Westboro—George A. Parker, Massachusetts State Registrar of Motor Vehicles has suspended the licenses of two drivers who interfered with fire apparatus responding to an alarm in Westboro.

MAXIM FIRE APPARATUS

All Types



All Sizes

If you are thinking of buying new apparatus shortly, be sure to get all the facts about MAXIM before you decide.
Send for complete information

MAXIM MOTOR COMPANY, Middleboro, Mass.
Metropolitan Sales Agents:
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Fire Apparatus
Fire Department Ladders
Fire Fighting Appliances

Dependable Fire Ladders, Life Belts, Door Openers, Battering Rams, Fire Hooks, Pike Poles, Roof Cutters, etc.

Write us when interested.

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Builders of equipment to meet your requirements. Specializing in Apparatus for Rural Fire Fighting.

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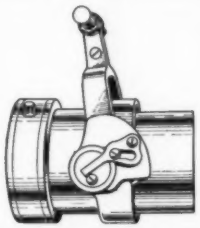

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Any size hard suction

Years of Service Prove it the Best

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Are given preference by so many fire protection and water works men because they know that more than half a century of experience go into their manufacture and they embody valuable and exclusive features.

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Presses for Lining Service Pipe with Cement

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FIRE FIGHTERS CLOTHING

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THE BODY GUARD MANUFACTURING CO.
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G

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RENSSELAER VALVE CO.,
TROY, NEW YORK.

Send Catalog "G" to

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Title .....
Street .....
City .....

KNOWLEDGE SITS IN ✣ ✣ WEALTH'S OLD SEAT

In the 'Eighties management was a matter of arbitrary power. The Old Man owned the business, and other people did as they were told. When his fat fist hit the desk the argument was over. He had to take the chance of being wrong, for accurate knowledge of conditions and of methods was difficult to obtain. There was no generally accepted science of management. He had no other authority to fall back on than the power derived from his ownership.

But with the 'Nineties things began to change. First came the move for systematization in business. Then followed a period characterized by the demand for efficiency in personnel and equipment. And more lately has developed the scientific viewpoint in business—the respect for authenticity in basic data for manufacturing and marketing.

The result is that today successful businesses are managed by virtue of skill and knowledge rather than by weight of ownership. Executives quote the authority, not of shares, but of facts. Exact knowledge of technique, of materials, of methods and of economic conditions is the mark of modern business management.

What brought about this change? Three factors: the vision of individual leaders, the natural acumen of other business men and the stimulation of thought by industrial and merchandising papers.

For the rapidity of this progress the business press has been largely responsible. It has not only been a leader in progressive business thought but in itself it has been a chief agent in the gathering and presentation of facts—up-to-the-minute, definite, proved, organized and correlated facts—upon which business has built its present sound structure. To this vital usefulness the business press owes its influence with business men. It has become an essential factor in the daily conduct of their affairs. It is this indispensability to its readers which renders the business paper of today so useful a means of advertising for any manufacturer of a product sold to industry or through the trade.

THIS SYMBOL *identifies an A B P paper . . . It stands for honest, known, paid circulation; straightforward business methods and editorial standards that insure reader interest . . . These are the factors that make a valuable advertising medium.*

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3 Acid Jars and Rings.
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5 Aerial Trucks.
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8 Alarm Systems, Municipal Telegraphic.
9 Alarms, Thermostatic.
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12 Banners, Trumpets, etc.
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14 Battery Zincs for Fire Alarm Batteries.
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16 Body Equipments.
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18 Brakes, Air.
19 Brake Linings.
20 Brooms, Fire.
21 Building Materials, Fire Retardant.
22 Caps, Firemen's.
23 Chains, Non-Skid Fire Apparatus.
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51 Gas & Smoke Helmets.
52 Gasoline & Oil Handling Equipment.
53 Goggles, Firemen's.
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Help Yourself!

This page is here to make it *convenient* for you to get complete specifications and prices from *reliable* manufacturers of equipment needed for your department. It is *your* page to use freely without any obligation.

To get the information you want, just mail in the coupon below with your name and address and numbers that indicate the equipment on which you would like descriptive literature.

We will then notify reliable manufacturers of your interest in such equipment and request that they send you complete information. They will gladly do this and it will be a pleasure for us to help you in this way. No charge whatever! Help yourself.

Fire Protection Equipment and Supplies

55 Hose Carts, Reels & Racks.
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58 Hose, Chemical.
59 Hose Holders.
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Nos. .....

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For Information on Any Equipment Not Listed, Write on This Page or Use Separate Sheet

5-14

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It has won out over others in more than one hundred competitive tests.
Protected from birds, storm and sleet.
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Double tone, (Two sirens in one).

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Quick-Acting Reliable

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Over 1,300 sets of Anderson-Hale Fire Station Door Openers are in successful use. They provide simple, durable, quick-acting doors that open inward. No obstruction to sidewalk. Attractive in appearance, cannot sag, closes tight, excludes cold, gives clear opening.
Opens from driver's seat or from floor. Many repeat orders from users.

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The Anderson Coupling & Fire Supply Co.
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"The World's Best by Test"

offer the world's greatest and most versatile range of choice involving sizes and methods of operation.

Write for descriptive matter showing sirens that have never lost in competition.

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One big whistle with 1930 improvements throwing the sound equally in all directions.
THE BEST MADE, we leave it up to you, your engineers or any good mechanic, and a test.
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Apply the new Pirsch Lapless Extension, and make any extension ladder reach 4' to 8' higher —with no more overhang on apparatus. Or, cut down overhang 2' to 4' without shortening ladder reach. A great improvement. Write for particulars.

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The New Eastman Deluge Gun

The New Eastman Deluge Gun is a Portable Turret Pipe that can be used on the truck or ground, as may be desired. The stream can be operated in any direction by one man.

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Better Rubber. Longer Life. Better Fitted. Moulded to Fit the Face. Better Vision. Renewable Lenses. Better Air. Better Work. Low Prices. High Quality.

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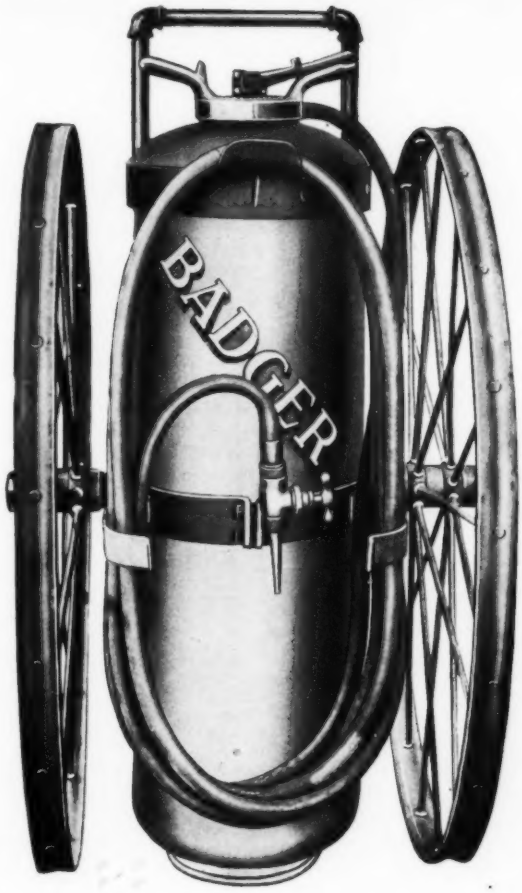

For Greater Safety

IN the Badger Fire Extinguisher, great care is used in the construction of every mechanical detail. It is equipped with French & Hecht Steel Wheels because of the practical advantages these wheels offer for chemical fire engines.

French & Hecht Steel Wheels are of a distinct type of construction. The method of fastening spokes to hub and tire is a highly developed process. This is why these wheels are actually about 35% stronger than other wheels of comparable weight.

These wheels are so accurately made that the fit of bearings and trueness of wheel are assured to the finest degree.

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There can be no other steel wheels like French & Hecht because the essential features of construction are exclusively French & Hecht.

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Wheel Builders Since 1888

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STEEL WHEELS

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Good fire hose protects life and property. Don't compromise on the quality of hose you buy. A few cents is the difference between fire hose that is just fire hose and fire hose that is fire protection insurance.

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